

EXCAVATIONS AT CRISPIN STREET, SPITALFIELDS: FROM ROMAN CEMETERY TO POST-MEDIEVAL ARTILLERY GROUND

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SUMMARY

This article describes archaeological investigations undertaken by Pre-Construct Archaeology Ltd on land off Crispin Street, Spitalfields, in the London Borough of Tower Hamlets. A total of 36 Roman inhumation burials dating from the 2nd and 3rd centuries AD, forming part of the extra-mural cemetery alongside Ermine Street were identified. Unusual burials included a decapitated individual.

During the late 13th century the site was bisected by the outer precinct boundary of the Priory and Hospital of St Mary Spital. This boundary which was delineated by a ditch and bank was to remain extant in one form or another on roughly the same alignment until the present development. Just prior to the Dissolution in 1538 a brick wall was constructed around the outer precinct, which was leased to the Guild of Artillery of Longbows, Crossbows and Handguns for the purpose of artillery practice. By the late 17th century the first houses were constructed along Crispin Street, backing on to the precinct known by then as the Artillery Ground. Soon afterwards the Ground was sold off and developed with new housing. The Tudor wall remained, forming the rear boundary between the houses fronting on to Crispin Street and Gun Street, but was subject to much subsequent alteration. As elsewhere in the Spitalfields area the site remained largely residential into the 19th century, but it also formed the focus for a variety of trades and light industries throughout the post-medieval period, including horn working,

which was evidenced by the discovery of an early 18th-century cattle horn core lined cesspit. There was also indirect evidence for clay tobacco pipe manufacture locally during c.1660 to 1680.

INTRODUCTION

The site lies to the north-east of the City of London within Spitalfields and is bounded to the north by housing fronting on to Brushfield Street and to the east, south and west by Crispin Street, Artillery Lane and Gun Street respectively (NGR TQ 3355 8170; site code CPN01) (Figs 1 & 2). In advance of proposed redevelopment Pre-Construct Archaeology Ltd was commissioned to undertake archaeological investigations on site by the Manhattan Loft Corporation Ltd and Osbourne Group. The area of archaeological impact was c.1,750m², with a proposed formation level at 2.4m below the current ground level at approximately 10.90m OD.

Excavation of the site took place during 2001 (Areas 1–6, Fig 2) and 2003 (Area 7). Changes to the original development plan resulted in an increased impact on the archaeological resource to the north of the site and in the south-west corner. As a result groundworks in these areas were monitored by an archaeological watching brief during

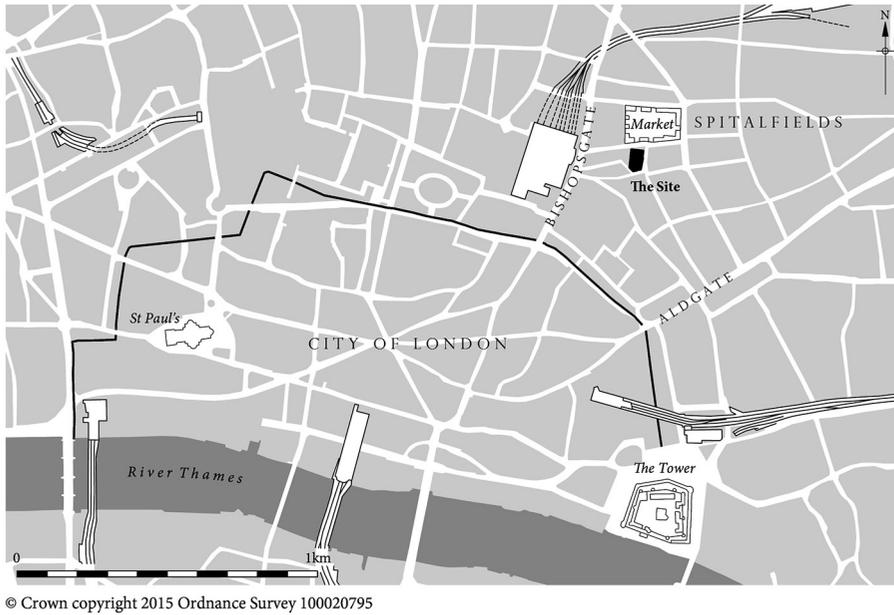


Fig 1. Site location (scale 1:25,000)

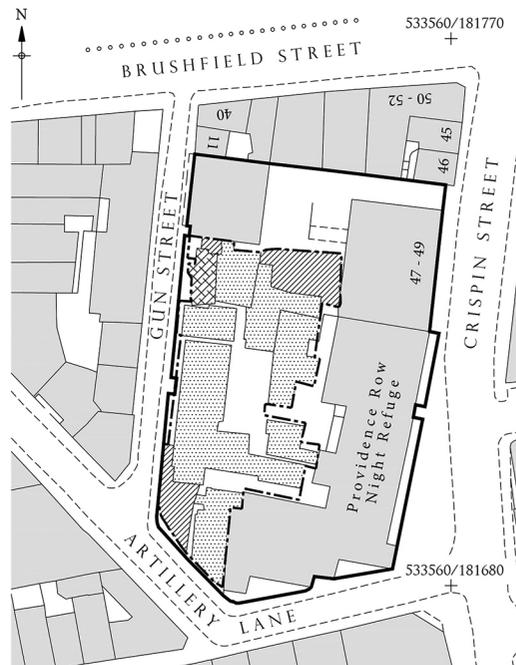
December 2004 to February 2005 (Areas 8 & 9).

This article uses the Museum of London codes for ceramics and building materials. Complete lists of these codes, their expansions and date ranges are available online.¹ Further information on the excavations identified by their site codes can be obtained from the Museum of London Archaeological Archive and Research Centre online catalogue. The historical research for this article was undertaken by the late Christopher Phillpotts.

GEOLOGY AND TOPOGRAPHY

The site lies on the Taplow Thames Gravel Terrace, which is overlain by brickearth, known as the Langley Silts (British Geological Survey 1993).

The area is fairly flat, although there is a slight slope southwards towards the river Thames. The level of the gravel was found to range from a high in the north of 10.76m OD to a low in the south of 10.02m OD. The brickearth survived to a maximum height of c.12.0m OD to the north of the site with



-  Areas 1 - 6 (Oct - Dec 2001)
-  Area 7 (Oct-XXX 2003)
-  Areas 8E, 8W & 9 (Dec 2004 - Feb 2005)

Fig 2. Location of the various areas of archaeological investigation (scale 1:1000)

a thickness of 1.24m, but had been subject to truncation elsewhere. The level on the brickearth is approximately a metre higher than generally reported in the area. The reason for this discrepancy is not known but may be related to a local variation in topography or simply better preservation.

ARCHAEOLOGICAL BACKGROUND

The site lies to the east of the former line of Ermine Street, the major Roman road heading north out of *Londinium* via Bishopsgate. Under Roman law burial of the dead within town boundaries was forbidden giving rise to the practice of burying alongside roads leading away from the main focus of occupation. In London significant extra-mural Roman cemeteries have been discovered adjacent to the main roads leading north, east, south and west from *Londinium* (Barber & Bowsher 2000; Beard & Cowan 1988; Bentley & Pritchard 1982; Hall 1996; Langton 1990; Mackinder 2000; Ridgeway *et al* 2013; Sankey & Connell 2007; Shepherd 1988; Swift 2003; Thomas *et al* 1997, 11–13; Watson 2003; Whytehead 1986).

John Stow, the Tudor historian, recorded that when ‘a large field, of old time called Lolesworth, now Spittlefield; which in about 1576 was broken up for clay to make bricks’ many ceramic cremation vessels, some containing early Roman coins, were discovered during quarrying. Other finds included inhumations, some of which were interred in stone coffins (Stow 1603, 152–3). These Roman burials described by Stow formed part of the northern cemetery, which lay on either side of Ermine Street, where more than 200 burials have been recorded (Barber & Hall 2000) (Fig 3). Unfortunately many of these discoveries are unpublished (Barber & Hall 2000; Hall 1996). Of the more recent excavations, those undertaken during 1998–1999 in the area of Spitalfields Market to the north produced the single largest recorded sample of the northern cemetery with reportedly up to 144 burials (Swift 2003, 24). Another 36 late Roman burials from Devonshire Square, Houndsditch, have been published (Sankey & Connell 2007).

Several of these sites have demonstrated that Spitalfields area was not used exclusively for burial (Holder 1997; Swift 2003; Thomas *et al* 1997). During the early Roman period

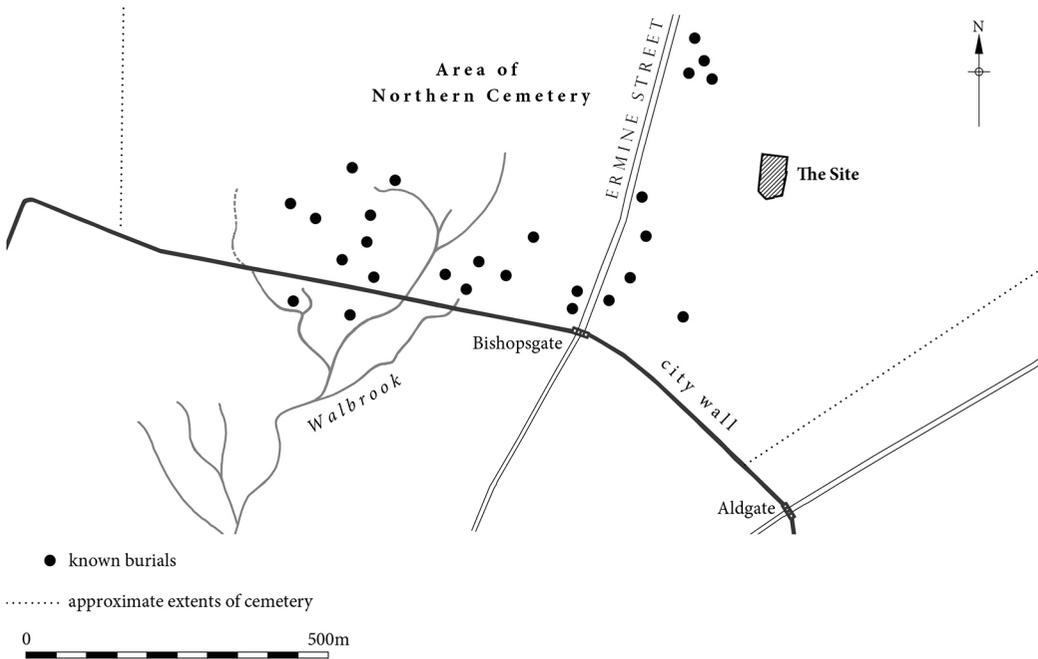


Fig 3. The location and extent of the northern Roman cemetery flanking Ermine Street (scale 1:12,500)

it was also being used to quarry brickearth and gravel. In the late Roman period, contemporary with the most prolific period of burial, there is evidence from Spital Square for a ditched enclosure, indicating that some areas were being set aside for other functions (Thomas *et al* 1997, 11–13). Indeed, the identification of ditches, drains, surfaces and possible beam slot buildings in the vicinity have been taken to be indicative of ribbon development (Swift 2003, 8).

PRE-CEMETERY ROMAN ACTIVITY (LATE 1st–EARLY 2nd CENTURIES AD)

The earliest evidence of activity on site was represented by a large ditch and two pits truncating the brickearth. The ditch was in the far north-west corner, orientated north-east to south-west (Fig 4). The cut had

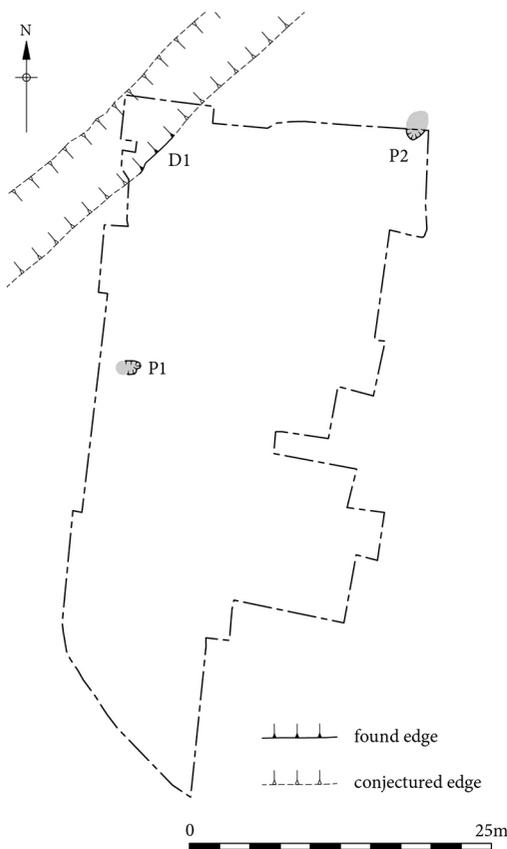


Fig 4. Pre-cemetery features; Ditch 1 and Pits 1 and 2, showing their found and conjectured extents (scale 1:625)

sloping concave sides falling to a slightly concave base and was filled with a clayey silt producing a small sherd of local mica-dusted pottery. The ditch continued beyond the northern and western limits of excavation. Where exposed it measured in excess of 2.50m in width and 1.00m in depth, which suggests it represented a significant feature within the landscape.

Although potentially earlier in origin, the pottery suggests the ditch went out of use during the late 1st or early 2nd century AD. A pit, containing pottery dated from *c.*AD 70 to 120 (P3; see 'The Roman cemetery' below) truncated the backfilled ditch. It is possible that this ditch represents an early Roman boundary dividing the landscape for agriculture or for the exploitation of the natural resources. Similar features were identified in the eastern cemetery (Barber & Bowsher 2000, 298). As several of these ditches survived to form cemetery plot boundaries, however, it has also been suggested that at least some of them may have been laid out from the beginning to demarcate areas set aside for burial (*ibid*). At Crispin Street there may be some degree of overlap in dating between the ditch and cemetery, with a couple of the burials pertaining to the early 2nd century AD (B15 & B21). Even if the very earliest burials were interred whilst the ditch was still open, or the possibility is considered that the pottery from the backfill and Pit 3 was residual when deposited, then for the boundary to have gone out of use the cemetery would have continued to function for its fills to have been cut by any of the burials.

The exact route of Ermine Street has yet to be established, although current evidence suggests it is likely to have run on roughly the same alignment as Bishopsgate Street (Swift 2003, 21; Thomas *et al* 1997, 13). Evidence for a further road, running east through Spitalfields, has also been found to the north at 282–294 Bishopsgate (BOS87) (Thomas *et al* 1997, 13). This would place the ditch at some distance to the south and east of known main roads. Taken together with the evidence for an early backfill and the truncation by later burials it is likely the ditch was dug for another purpose. As suggested above this may have been to divide or enclose the land for quarrying

or agriculture, a division that subsequently became redundant when the area became a cemetery. A series of ditches were also revealed at Spital Square to the north. These ditches are thought to have been contemporary with the late Roman burials and indicate that certain areas in the vicinity continued to be set aside for purposes other than funerary (*ibid*).

Two pits probably pre-date the cemetery. Of these Pit 1 was identified towards the west central part of the site, truncated to the west by a medieval ditch (Fig 4), and filled with redeposited brickearth containing ceramic building material dated to AD 55 to 160 and three small sherds of abraded pottery (Hoo and Verulamium region white wares) dating to AD 50 to 160/200. The relative lack of cultural material within this pit suggests it was not used for the disposal of rubbish but perhaps corroborates that the area was exploited for brickearth extraction. As with the ditch, the dating of the pit overlaps with that of the burials, but as it was cut by a possible disturbed grave (B36) it is likely to be earlier.

Pit 2 was located towards the north-east corner of the site, extending beyond the northern limit of excavation (Fig 4). The fill, a silty clay, contained a few sherds of pot including Miscellaneous Oxidised Wares (OXID) and Verulamium region white ware (VRW), dating to AD 50 to 160/250.

THE ROMAN CEMETERY (EARLY 2nd TO MID-3rd CENTURIES AD)

Introduction

With the exception of the boundary or enclosure ditch to the north and a small number of quarry pits the site was undeveloped when first used for burial. On the north-west side of the site the burials were cut into the natural brickearth and the graves were infilled with a 'dirty' silty brickearth. This redeposited material also formed the 'cemetery soil' and covered the grave cuts at a top level of 12.10m OD. This cemetery soil was probably derived from the upcast produced by grave digging, but it may also have been modified by later horticultural activity, post-dating the cemetery. Indeed, disturbance of this nature is corroborated by

the presence of intrusive finds including two French jettons dating to the 14th and 15th centuries, <SF84> and <SF20> (see Gaimster PDF supplement).

The grave fills contained small quantities of pottery, ceramic building materials and animal bones. Material of this nature is not considered to have been deposited as offerings or even to have derived from peripheral ritual activity, but rather to represent residual evidence of background activity in the vicinity (Barber & Bowsher 2000, 76–81; see Yeomans, Table 7, PDF supplement). The material is predominantly early Roman in date and well paralleled in London, but the assemblage is too small to reveal anything about its origins or the activities it was derived from.

Layout

The 36 burials were moderately evenly distributed across the site with relatively little intercutting and very tentative evidence for clustering (Fig 5). The majority was concentrated to the south of the site, possibly grouped into four clusters. To the centre B1–B5, B9, B17 and B24 form a loose group with B6–B8, B10, B13–B16, B18–B21 and B26 clustered to the east. To the far west and south B32, B33, B35 and B23, B25 and B34 may represent two further possible small groups. There was a concentration of burials in the north-west corner of the site with B27–B31. The remaining burials were more scattered, B22 apparently isolated to the north of the trench and B11, B12 and B36 to the west.

Clustered burials in Roman cemeteries have previously been interpreted as representing family groups, although other associations have also been proposed including religious belief, status, ethnic or cultural affinity, shared occupation and commercial considerations (Barber & Bowsher 2000, 300, 333; Woodward 1993, 235). The limited area of excavation, the small number of burials and their poor preservation make it difficult to confidently identify meaningful spatial patterning. Indeed, as the plan of the excavated burials constitutes only one portion of a much larger cemetery it does not give a true reflection of the density and distribution of burials across the



Fig 5. The Roman cemetery showing individual graves and line of the earlier ditch (scale 1:400)

whole necropolis. As such it is important to understand that any variations observed within the excavated area may not be reflected across the rest of the cemetery. Indeed, at Devonshire Square, for some of the most southerly burials a very different layout is indicated with neatly ordered rows

of almost entirely east–west burials (Sankey & Connell 2007, 56). It should also be noted that medieval and post-medieval truncation is likely to have impacted the observable pattern.

In reviewing the characteristics of the burial clusters it is evident that both males

and females of mixed age range are present. Also it is clear that the graves are aligned both north–south and east–west, and that different burial practices are found within the same groups. At Poundbury in Dorset a similar distribution across the excavated cemeteries was tentatively interpreted as family grouping (Woodward 1993, 235). Unfortunately, the skeletal material recovered from the Crispin Street site is too fragmentary to compare metric and non-metric traits to corroborate this idea. Four instances of directly intercut burials were recorded, one group within the south-western cluster (B32 & B33), one to the north-west (B31) and two within the eastern group (B10, B14 & B6–B8). In two cases three individuals were buried sequentially in exactly the same location. This is unlikely to be coincidental, and given the apparent availability of space in the cemetery and general preference for avoiding other graves may suggest a more direct connection between the individuals involved.

Two adjacent, although differently aligned, burials in the south central cluster contained disc-shaped flints in a very similar location on the chest (B4 & B5 discussed below). Their presence in both graves may indicate a linkage, although it should be pointed out that despite being deliberately selected and placed the flints are not worked and therefore their occurrence could potentially be under-represented in other graves.

Dating and longevity

The difficulties associated with dating burials have been discussed elsewhere (Barber & Bowsher 2000, 8–9). With only a small number of the inhumations producing datable grave goods a detailed understanding of the chronology and longevity of the cemetery is not possible. A total of eight ceramic vessels were recovered from five of the graves all dating to between the early 2nd to mid-3rd century AD. A silvered bronze *nummus* depicting *Urbs Roma* and the Wolf and Twins, <SF22>, dating to AD 330–335 was recovered from cemetery soil which also included intrusive finds from later disturbance. This 4th-century AD find, therefore, may not be associated with the period the cemetery was in use (see above). The evidence for dating is

limited but there is no indication that burial vessels were salvaged or old when deposited and very little late Roman pot was present in general. Together this indicates a relatively early date, with at least four burials (B6, B15, B20 & B21) being interred during the 2nd century AD.

As inhumation is generally considered to be a preferred burial rite of the late Roman period, with a transition from cremation to interment taking place during the mid or late 2nd to mid-3rd century AD, this would suggest that the few dated burials here are relatively early (Barber & Bowsher 2000, 300; Philpott 1991, 223). The significance of this cannot be determined in lieu of integration with the extensive dataset from the remainder of the northern cemetery. At the eastern cemetery early Roman burials are present alongside later burials in all areas of the cemetery, with no evident chronological shift across the cemetery as a whole (Barber & Bowsher 2000, 54). It is possible that some of the unaccompanied burials excavated at Crispin Street are late Roman but, as discussed, the absence of 3rd- or 4th-century AD material from the graves, and a very small quantity of such finds from the site as a whole, suggest this is unlikely.

The absence of cremation burials here, elsewhere often found alongside contemporary and later inhumations, is interesting. Of course this could be the result of poor survival or later truncation, but if not it implies that the site was used expressly for inhumation at an early date. It has been suggested, although not substantiated, that early inhumations could represent migrants from areas with an inhumation tradition, or could perhaps be explained by poverty as the cremation process requires greater resources (Barber & Bowsher 2000, 300). A degree of poverty among the material is hinted at in a small number of burials on site (see ‘Status and society’ below). It is becoming apparent, however, that in London at least early inhumation burials may be more commonplace than previously supposed, having been recorded now in all of the cemeteries (Barber & Bowsher 2000, 299–300; Barber & Hall 2000, 109; Dean & Hammerson 1980, 17; Ridgeway *et al* 2013, 11–15; Shepherd 1988, 11; Watson 2003, 38 & 53). The notion that they are out of the

ordinary perhaps needs to be rethought in the context of London as a whole and in contrast to other contemporary urban cemeteries across Britain.

Burial practice

Grave size, shape and depth

As found in many Roman cemeteries, the shape and dimensions of graves varied in accordance with the size of body or coffin if present (Barber & Bowsher 2000, 82; Ridgeway *et al* 2013, 15, 19, 22). The grave cuts recorded were generally rectangular in plan with vertical sides falling to a flat base. They ranged in length from 1.76m to 2.92m and in width from 0.50m to 0.80m, with an average length of 1.98m and width of 0.60m.

The bases of the graves lay between 9.85m OD (B33) and 11.16m OD (B22) with an average basal level of 10.36m OD. Due to horizontal truncation the level of the original ground surface remains uncertain, although elements of the cemetery soil survived towards the north-west of the site to a maximum height of 12.10m OD. If the original ground surface is estimated at *c.*12.0m OD, then the average grave depth would have been *c.*1.64m. Of course this fails to account for topographical variation, meaning that B22, towards the north of the site, would have been very shallow at 0.84m and B33, towards the south, very deep at 2.15m. There is a natural drop in ground level from north to south by perhaps as much as 0.70m, suggesting more reasonable depths of 1.19m for B22 and 1.80m for B33. The maximum grave depth recorded at the eastern cemetery of Roman London was 1.80m (Barber & Bowsher 2000, 83).

Alignment and head location

Across many Roman cemeteries there appears to be a general conformity in alignment with burials orientated either north-south or east-west (Barber & Bowsher 2000, 83; Farwell & Molleson 1993; Watson 2003, 32). The alignments observed at Crispin Street, whilst clearly including burials following both orientations, demonstrated greater variability. In order to establish whether there was any significance to these orientations a similar approach to

that employed at the eastern cemetery was adopted, whereby the burials were divided by degree from Ordnance Survey grid north with north-south burials falling between 334° to 33° and east-west burials between 65° to 125°.

Following this method, 30 of the 36 burials fell within these margins, with 14 being orientated north-south and 16 east-west. The remaining six either fell between these alignments or were too disturbed to classify. Of the burials categorised as east-west, six had the head located to the east and eight to the west. The head location of the burials orientated north-south was less divided with 13 to the north and only one to the south. A preference for head location to the north and even more significantly to the west was identified at the eastern cemetery (Barber & Bowsher 2000, 85). In the predominantly east-west orientated burials recorded to the south of the northern cemetery all had the head to the west (Sankey & Connell 2007, 56).

The differing alignments of Roman burials have been taken to reflect religious beliefs, with the observed increase in east-west burials into the later period traditionally being linked with the rise of Christianity. Further research, however, suggests that there is nothing distinctive about Christian burial and, in particular, there is no evidence to link Roman Christian belief with an east-west alignment (Barber & Bowsher 2000, 322; Philpott 1991, 239). In London, local topographical features, for example watercourses, roads or land boundaries, appear to be more influential in determining the alignment of burials (Barber & Bowsher 2000, 84; Ridgeway *et al* 2013, 15, 23; Watson 2003, 32). Indeed, in the southern cemetery many of the burials were aligned to respect roads or ditches and are consequently orientated either north-west to south-east or north-east to south-west (Mackinder 2000; Ridgeway *et al* 2013, 105-12). At Devonshire Square in the northern cemetery, some of the southernmost burials appear to be principally aligned parallel to the city wall (Sankey & Connell 2007, 55).

With such a small sample and limited number of dated burials the chronological or topographical significance of alignment is difficult to determine. Indeed, it is not possible to observe which alignment, if any,

was important at what time. It is also unclear if the burials conform to any particular boundary or topographical feature as no contemporary features of this nature were identified. Of course, it is possible these exist beyond the limits of excavation, with burials even aligning, for example, parallel or perpendicular to the main north–south road.

As it is thought to represent a deliberate choice it has also been suggested that alignment might correlate with other aspects of burial practice (Barber & Bowsher 2000, 83). Excluding a possible social or occupational difference between burials, there is no evidence for any other connection from the large sample from the eastern or the western cemeteries (Barber & Bowsher 2000, 83–4 & 329; Watson 2003, 32). The sample at Crispin Street is small but a link between burial alignment and age, sex, position of the body or adornment was not identified.

At a basic level the parameters accepted in defining a burial as north–south or east–west are perhaps too broad. The majority of burials on site have been split into either a north–south or east–west grouping which may be misleading (Table 1).

Arrangement of the corpses and confining the dead

Of the 36 burials the majority were supine and extended (Table 1). The head was most commonly positioned looking up or to the left, with only two positioned to the right. Only two of the burials had both arms extended to the side of the body (Barber & Bowsher 2000, 86). In the northern cemetery one or both arms were commonly flexed, with the lower limb at a right angle across the body or the hand on the same side, in the centre of, or on the opposite side of the pelvis, on the opposite shoulder or behind the body (Sankey & Connell 2007, 56). Interestingly, it has been suggested that those burials where one arm is extended and the other folded across the waist may relate to the manner of clothing, particularly representing the position of the arms in a toga (Barber & Bowsher 2000, 87). The position of the legs is less variable, the majority being straight and extended. Just five burials had flexed or crossed legs. As the sample is small it is not surprising that no link can be confirmed between body position and age or sex.

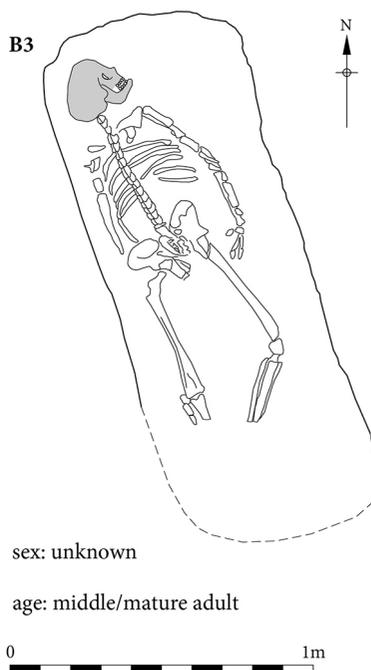


Fig 6. *Burial 3, extended and prone (scale 1:25)*

Two of the burials stand out, one (B3) being extended but prone (Fig 6), the other (B11) on its right side with the head removed and placed behind the lower back (Fig 7a–c). These two inhumations can be viewed as being a comparatively uncommon form of burial. There has been much discussion of the possible motivation behind such practices which are certain to have had a ritual dimension (Black 1986; Boylston *et al* 2000; Cotton 1996; MacDonald 1979; Merrifield 1987, 71–6).

It has been argued that ‘decapitation relates to a mortuary rite directed at individual corpses in imitation of a figurative association between the head and an after-death existence or role’ (Boylston *et al* 2000, 253). There is a long tradition of interest in or reverence for the human head that dates back as far as the Late Bronze Age (Cotton 1996, 91).

Decapitations can represent the cause of death or they can be carried out post-mortem, either as a result of execution, sacrifice or as an ‘act of confinement’ (see below). It may have been believed that individuals who died an untimely or violent death would be reluctant to depart and that consequently

Table 1. Catalogue of the inhumations (ft = fittings; M = Male; F = Female; J = Juvenile (1–12 years); SA = Subadult (12–19 years); YA = Young adult (20–35 years); MiA = Middle adult (35–50 years); MA = Mature adult (50+ years); D = Discrepant; Dcp = Decapitated)

Burial	Sex	Age	Orientation	Head	Position	Adornment	Nails/ft	Coffin
1	F	YA	E/W	E	Supine	-	-	-
2	-	YA	E/W	W	Supine	-	-	-
3	-	Mi/MA	N/S	N	Prone	-	-	-
4	-	Mi/MA	E/W	E	Supine	Flint	-	-
5	M?	Mi/MA	N/S	N	Supine	Flint, oyster shell	-	-
6	-	Mi/MA	D	NW	Supine	Two vessels, oyster shell	10	Y
7	M?	YA	-	NW?	-	-	1	?
8	-	-	-	-	-	-	-	-
9	M?	MiA	N/S	N	Supine	Two vessels	-	-
10	M	Mi/MA	N/S	N	Supine	-	-	-
11	M	YA	E/W	Dcp	Right side	-	-	-
12	F	MA	E/W	W	Supine	-	-	-
13	-	A	E/W	W	Supine?	-	6	Y
14	F?	YA	N/S	N	Supine	Quern frag	10	Y
15	F	Mi/MA	E/W	W	Supine	Vessel	-	-
16	M?	Mi/MA	D	SE	Supine	-	-	-
17	F	MiA	D	NW	Supine	-	14	Y
18	M	Mi/MA	E/W	W	Supine	-	-	Y
19	M	MiA	D	SW	Supine	-	-	-
20	-	MiA	E/W	W	Supine	Two vessels	SF40– 355	Y
21	-	SA	E/W	W	Supine	Vessel	-	-
22	M	A	E/W	W	Supine	Chalk	6	Y
23	-	A	E/W	E	Supine	-	-	-
24	F	YA	N/S	N	Supine	-	4	Y
25	-	YA	E/W	E	Supine	-	1	Y
26	F	YA	N/S	N	Supine	Chalk	-	-
27	-	YA	E/W	E	Supine	-	-	-
28	M?	MiA	N/S	N	Supine	-	25	Y
29	-	J	N/S	S	Supine	Shale bracelet, shoe	3	?
30	M	MiA	N/S	N	Supine	-	-	-
31	-	J	N/S	N	Supine	-	5	Y
32	-	-	N/S	N	Supine	-	3	Y
33	M?	MiA	N/S	N	Supine	-	-	-
34	-	-	E/W	E?	Supine?	-	-	-
35	-	SA	N/S	N	Supine	-	-	-
36	-	A	E/W?	?	?	Samian base	-	-

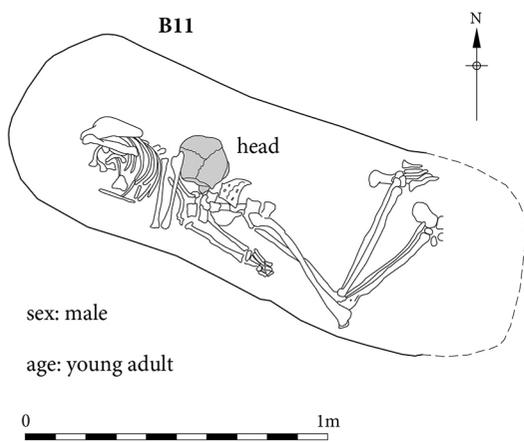


Fig 7a (left). Burial 11, showing posture; the body is lying on its right side with the decapitated skull placed behind the lower back (scale 1:25)

Fig 7b (middle). Burial 11, vertical view showing the posture and position of the decapitated skull (0.5m scale and north arrow)

Fig 7c (bottom). Burial 11, detail of decapitated skull

A



B



C

their spirits could rise from the grave to haunt the living (Barber & Bowsher 2000, 323; Black 1986; Boylston *et al* 2000, 252; Merrifield 1987, 76). As the soul was thought to reside in the head the decapitation rite may have been thought of as a way to ensure a complete and final separation of the soul from the body (Merrifield 1987, 75). In the same way as the practice of burying an individual in a prone position, sometimes additionally weighing the body or coffin down with stones, is interpreted as an act of confinement. Again the motivation is the fear that the dead will return. Burial in the prone position may also indicate to the unready the direction in which the soul should travel (Black 1986, 226–7; Merrifield 1987, 76).

The archaeological evidence reveals that decapitated burials are generally variable in terms of gender and age group, although relatively few children are represented (Barber & Bowsher 2000, 91; Boylston *et al* 2000; Merrifield 1987, 72; Philpott 1991, 244). In view of this it has been suggested that burials of this nature are not representative of society's outcasts (Philpott 1991). Indeed, evidence is forthcoming from a number of sites that decapitated burials are in all other respects treated no differently than the remainder of the cemetery population (Barber & Bowsher 2000, 90, 99; Boylston *et al* 2000, 247–8; McKinley 1993, 44; Merrifield 1987, 74). In a number of these burials there was evidence to indicate that the decapitation was achieved post-mortem, from the front, with the body in a supine position and in some cases with evident care (Boylston *et al* 2000, 246; Clarke 1979; McKinley 1993, 44). In other examples, however, the decapitated individuals have been interpreted as criminals, captives and possibly sacrificial victims. Possible executions are evident at Cirencester (Gloucestershire) and Cambridge (Cambridgeshire), with individuals decapitated from behind, and potential sacrifices at Winchester (Hampshire) that are uncoffined and awkwardly positioned with some evidence of violence (Clarke 1979; Taylor 2003, 19; Wells 1982).

The archaeological evidence reveals a diverse picture for the practice of prone burial. At Kempston (Bedfordshire) these burials varied in gender and mature adults were proportionally better represented

(Boylston *et al* 2000, 247). In contrast to the decapitated burials only one was coffined and none were accompanied with grave goods (*ibid*). At Cirencester the decapitated burials were thought to represent individuals of low repute (Wells 1982). While at the eastern cemetery of London, it is the females and immature who figure most frequently in this category, the latter also containing some of the largest assemblages of grave goods (Barber & Bowsher 2000, 87, 323). It has been suggested that the richly adorned child burials at Lankhills, Winchester, may have been intended to conciliate the gods into allowing these individuals access to the after-life before their time (Clarke 1979, 323). Other prone burials from the eastern cemetery had large stones placed upon their backs and one, although coffined, had its hands bound behind its back (Barber & Bowsher 2000, 87).

The evidence would indicate that the rites of decapitation and prone burial probably had a number of motivations, perhaps with the acts of separation and confinement being the most prevalent. The general difference in associated mortuary treatment may indicate whether the buried individual was well thought of or not, but here too the evidence can be ambiguous. The osteological evidence indicates that B11 (Fig 7a–c) represents a 'true' decapitation, rarely identified in London, with the head having been removed by two or three blows, struck from the front with a sharp bladed instrument (for pathology see under 'Discussion' below). Removal in this way and the absence of any other defensive wounds suggest that the individual was already dead when decapitation took place or if not then heavily drugged.

The decapitated individual represented by B11 is orientated east–west and was surrounded by other burials. He was a young adult male with little pathology, but the mortuary treatment does differ from the other burials excavated. His burial was interred without coffin or grave goods, on the right side with the legs flexed. Most unusually the head was not placed on the legs or at the feet where it is most commonly found in decapitated burials (Philpott 1991), but it was wedged behind the lower back. Decapitation may not have been the cause of

death for B11, but some ignominy appears to be suggested in his burial, perhaps beyond the fact that he died young and therefore his spirit might be unruly.

Prone burial B3 (Fig 6) was interred without a coffin or any surviving grave goods, although the latter may have existed at the foot of the grave prior to later truncation. The absence of a coffin and probable absence of a shroud, given the spreading of the arms and legs, would mitigate against the idea that the prone position was an inadvertent mistake at the time of burial. The burial was of a middle to mature adult of unknown gender and aligned north–south with the head to the north. Unlike the decapitated individual, however, B3 formed part of a larger cluster, aligned closely with B9, that of a middle adult male accompanied by two vessels. Perhaps in this context confinement or guidance of the soul was the objective. In the same way the small number of nails recovered from some of the graves may also be indicative of confinement (Table 1). Where the presence of the odd nail cannot be explained as residual, for example derived from the truncation of an earlier coffined inhumation, or unless all other traces of a coffin have since degraded, it could be that their inclusion was intended symbolically to ‘fix’ the dead (Black 1986, 223; Dungworth 1998, 153).

Containers/ evidence for coffins

Evidence that at least ten of the inhumations (B6, B13, B14, B17, B20, B22, B24, B28, B31

& B32) had been interred in coffins was provided by the presence of nails and iron fittings arranged around the body (Table 1). However, the presence of only one or two nails within a grave cannot be taken to indicate a coffin (see above). Later disturbance can confuse the picture, but generally the presence of a coffin was corroborated by not only the quantity, but also by the arrangement of nails in relation to the body. However, the absence of nails does not necessarily prove that no coffin existed originally. It may be that in some of the graves the evidence for nails has completely corroded away, or that the coffin possessed no metal fixings. In two examples (B18 & B25), a reddish-brown silty clay deposit was recorded overlying the skeleton. This may represent timber staining and if so may suggest that these two burials were also contained within a coffin.

The majority of the inhumations in the eastern cemetery were buried in wooden coffins, usually nailed, but also possibly pegged or jointed (Barber & Bowsler 2000, 92). At Devonshire Square 70% of the 35 graves discovered showed evidence of coffins (Sankey & Connell 2007, table 1). Under a third of those at Crispin Street revealed evidence for coffins, although as suggested the true number is likely to be under-represented due to poor survival and truncation. Where identified, there was no correlation between the presence of a coffin and gender, alignment or in the provision of burial goods. Just two of the coffined burials (B20 & B28) produced fittings. Burial 20 (Fig 8) contained a number of unidentified

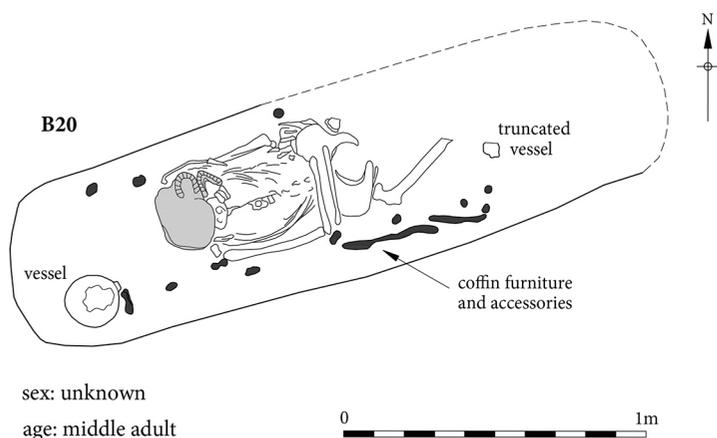


Fig 8. Burial 20, showing coffin furniture and accessories (scale 1:25)

iron objects in addition to fragments of iron sheeting and studs. As at the eastern cemetery these may represent the remains of reinforcing plates or perhaps some form of external decoration (Barber & Bowsher 2000, 94). Fragments of mineralised wood were identified on the iron fittings from B28.

Chalk burials

Two burials, B22 (Fig 9) and B26 (Fig 10), were notable for the presence of a white substance, possibly chalk, packed around the bodies. Chalk burials have been identified on a number of sites across Roman Britain.



Fig 9 (above). Burial 22, vertical view of chalk burial (0.5m scale and north arrow)



Fig 10 (left). Burial 26, vertical view of torso of chalk burial (0.5m scale)

A survey of these has led to the suggestion that the practice was adopted in imitation of the high-status plaster and gypsum burials introduced to Britain from North Africa via the north-western provinces (Philpott 1991, 90–5, 223). It is thought that although the custom may initially have been taken up for reasons of fashion or as a sign of status it has also been argued that the perceived preservative qualities of lime or chalk may have been later exploited by Christians who believed in the resurrection of the body (Merrifield 1987, 78; Philpott 1991, 93–5). It has been suggested that patches of chalk on or near specific parts of the body may relate to a perception of which parts of the body had been a cause of death or were infected (Whytehead 1986, 57).

There is little evidence to link ‘plaster burials’ with Christianity (Philpott 1991, 93–5). Indeed, the chalk burials at the eastern cemetery are spatially and chronologically widely distributed, rarely forming distinct groups and sometimes clearly associated with burial rites considered to be pagan (Barber & Bowsher 2000, 321). Furthermore, there is no observable correlation with gender, alignment or in the provision of burial goods, although proportionally more infants and immature individuals were represented. This has been taken to indicate that the use of chalk is not linked to status but employed as one of several measures to protect the living from the return of those who died prematurely (*ibid.*, 329; Black 1986, 227).

At Crispin Street both chalk burials were supine adults, neither of which were accompanied by any grave goods (Table 1). Burial 22 was an adult male, with no evidence for disease or trauma and orientated east–west with the head to the west. The body had been placed in a coffin with a layer of chalk up to 0.10m thick packed around the body (Fig 9). The second burial, a young adult female (B26), had no evidence for a coffin and was aligned north–south with the head to the north. A thin layer of chalk-like material appeared to have been spread over the front of the face with patches covering the upper right arm and left hand (Fig 10). Pathological evidence demonstrated that there was a fracture to her right clavicle. The fracture had reset and healed and so is unlikely to represent the cause of death,

although the trauma may have caused enough suffering to be remembered and specifically marked out in burial.

Burial goods

The traditional explanation for the inclusion of goods within a burial is in the provision of sustenance, comfort or protection to the spirit of the departed while confined within the tomb or on the journey to or in the after-life (Black 1986, 220). A further explanation for the deliberate deposition of an object may be the significance it held for the deceased during life. It may have been felt necessary to deposit such objects within the grave not only to comfort the spirit but to avoid the persona of the dead individual exerting a malign influence should they pass to a new owner (Webster 1986, 131–2).

Eight of the 36 burials excavated at Crispin Street contained burial goods, representing just under a quarter of the total (B4–B6, B9, B15, B20, B21 & B29) (Table 1). This relative proportion is paralleled within the largest group of burials dug to date elsewhere in the northern cemetery (280 Bishopsgate and Spitalfields ramp: Swift 2003) and at the eastern cemetery (Barber & Bowsher 2000, 117). The sample is too small, however, to reveal any significance to the distribution of the grave goods in that their occurrence does not appear to be age- or gender-related, nor focused in any one burial cluster. The range of goods encountered is also fairly common, including ceramic vessels and personal adornment, although one or two less familiar finds may represent interesting symbolic substitutions.

A total of eight ceramic vessels were recovered from five separate graves. Burial 6 (Fig 11), the uppermost in a sequence of three directly intercut inhumations, contained a miniature sand-tempered (SAND) jar, <SF16> (Fig 12.1), placed above the head and a large fragment of a second sand-tempered everted rim jar, <SF17>, beside the lower right leg. It has been suggested that miniature vessels may have fulfilled a particular symbolic or ritual function (see Gerrard & Lyne PDF supplement). Burial 9 also contained two vessels, a black-burnished ware 2 (BB2) pie-dish, <SF23>, inverted over the top of a Colchester unguent pot, <SF58>

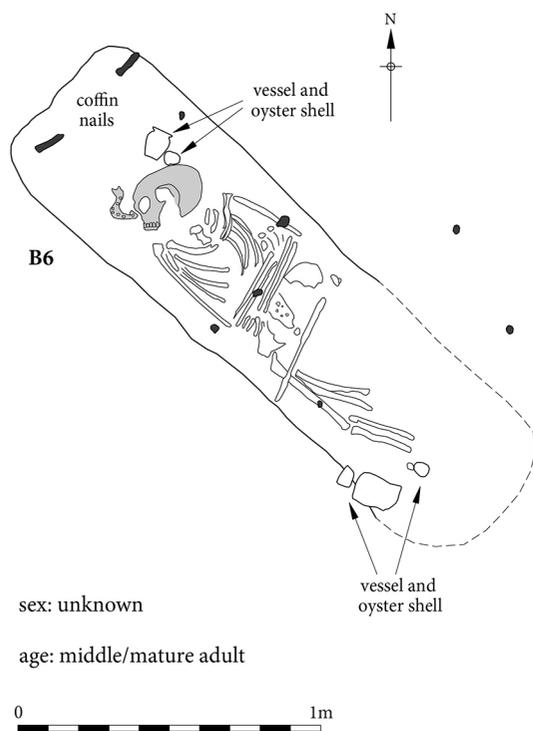


Fig 11. *Supine Burial 6, showing grave goods (scale 1:25)*

(Fig 12.2), both adjacent to the lower right leg (Fig 13). A single local oxidised ware lid, <SF52> (Fig 12.3), accompanied B15, again towards the foot of the grave, but interestingly upside down (Fig 14). It has been suggested that the lid may have been intended to serve as a platter, perhaps in the absence of a true dish to accompany the burial (see Gerrard & Lyne PDF supplement).

Burial 20 (Fig 8) contained an intact, although recently damaged, sand-tempered ovoid flagon, <SF41>, placed above the head as well as part of a Verulamium region white ware tazza. It is possible the latter is residual although it has been suggested that tazze, in

being used to burn incense, would represent an appropriate funerary item (see Gerrard & Lyne PDF supplement). Lastly, B21 was accompanied by a Highgate Wood ware C decorated necked-jar, <SF49> (Fig 12.4), placed between the lower legs.

The pottery vessels can all be dated to the 2nd to mid-3rd century AD, slightly earlier than the predominantly 3rd-century AD date suggested at the eastern cemetery (Barber & Bowsher 2000, 121). The range of fabrics and forms encountered can be largely paralleled at the eastern cemetery although it would appear that certain vessels, namely sand-tempered (SAND) and local oxidised ware (LOXI) examples, were used there only as cremation containers (*ibid*). This would substantiate the relatively uncommon, although by no means unprecedented nature of the early inhumations that are accompanied by such vessels on site. Some or all of the vessels may have contained food or liquid offerings but no evidence for this survived.

Other funerary or ritual activity may be represented by two further vessels. The first was a possible local micaceous zoomorphic spouted strainer (Fig 12.5) in a small circular pit (P3) adjacent to B28 (Fig 5). Vessels of this nature represent uncommon finds and are thought to have been used in the preparation and pouring of liquids (see Gerrard & Lyne PDF supplement). The proximity of the pit to B28 may be misleading but it is possible the vessel was used for the purpose of graveside libation and that it was subsequently buried. However, unless curated the relatively early date of c.AD 70 to 120 suggests the vessel represents a ritual deposit in its own right, perhaps pre-dating the inhumation burials. The second vessel, a Hoo flagon, <SF11> (Fig 12.6), was recovered complete but crushed by the weight of the cemetery soil. The flagon, dated to the late 2nd century AD, may represent a disturbed grave good or

Key to Fig 12: 1. Miniature jar in sand-tempered fabric (SAND) <SF16>, from Grave 6; 2. Colchester unguent pot form CAM309 <SF58>, from Grave 6; 3. Local oxidized ware (LOXI) lid <SF52>, from Grave 15; 4. Highgate Wood ware C (HWC+) decorated necked-jar <SF49>, from Grave 21; 5. Local micaceous (LOMI) zoomorphic spouted wine strainer (504) from Pit 3; 6. Hoo ware (HOO/NKWS) flagon <SF11>, from the cemetery soil [90]; 7. Two blue and purple Westerwald stoneware (WEST PURP) mugs (286) from the later additions to Building 1; 8. London-area post-medieval red ware (PMR) sugar loaf mould (286) from replacement floor make-up of Building 1; 9. PMR sugar loaf mould, context as no. 8; 10. PMR sugar loaf mould, context as no. 8; 11. South Hertfordshire-type grey ware (SHER) (276) storage jar base (residual)

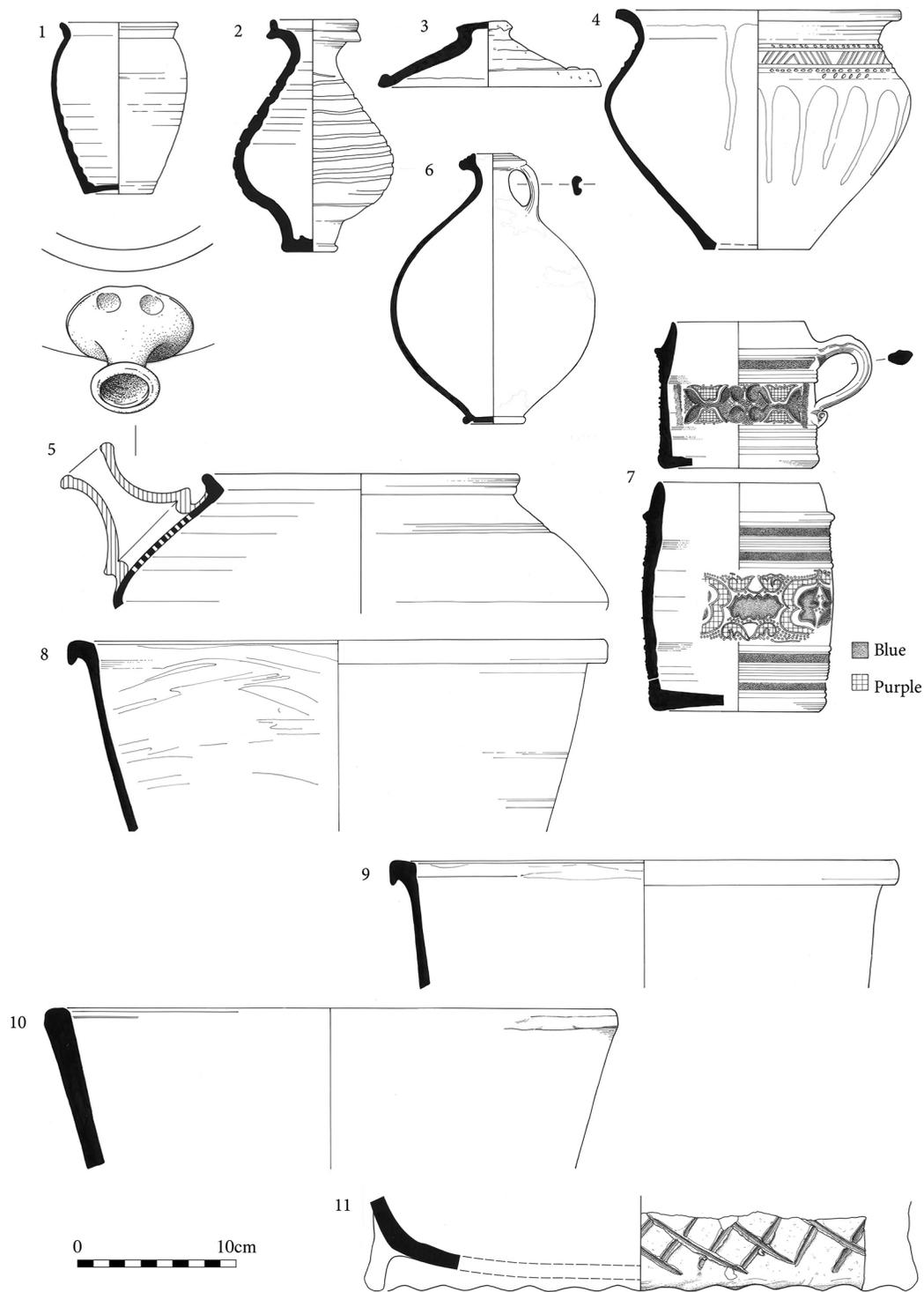


Fig 12. Roman, medieval and post-medieval ceramics. See key facing



Fig 13 (left). Vertical view of Burial 9; north is to the top of the image (0.5m scale)

Fig 14 (below). Vertical view of Burial 15 with a ceramic lid, <SF52>, next to the left ankle (0.5m scale and north arrow)



possibly a votive deposit (see Gerrard & Lyne PDF supplement).

Just one burial, B29, that of a juvenile of unknown gender, was interred with a personal ornament and evidence of footwear. A Kimmeridge shale bracelet, <SF500>, was located close to the pelvis, probably in the natural position the lower left arm or flexed right arm would have occupied. This is a well-known class of object and a common grave good (J Gerrard, pers comm). Only 50% of the circumference survives, but it is not clear if this represents deliberate breakage or is significant in some way. The relatively small diameter, 50mm, would tie in with the known age of the buried individual. Allason-Jones (1996) suggests that jet and shale may have been invested with magical properties in the Roman period and might have been associated specifically with women. The preservation of an outline of hobnails would indicate the placement of a shoe or boot across the upper legs (femora). The placement of shoes in the grave provides further evidence for the symbolic significance footwear had as equipment for the journey to, or use in, the after-life. Although evidently placed on the feet in some burials, footwear cannot simply be seen as items of dress, particularly when placed in burials in areas other than at the

feet or where only one shoe of the wrong size appears to be included, as in B29 (Barber & Bowsher 2000, 137).

Two of the burials contained perfectly disc-shaped flints <SF18> and <SF19> in the same location on the chests of B4 (Fig 15) and B5 (Fig 16). The example in B5 also lies over the left hand, flexed across the chest. Both flints are naturally created pot lid spalls, but their inclusion appears decidedly intentional given that they are of a similar shape and size and in the same location in two adjacent burials. A coin placed in the mouth or near the head or hand is usually interpreted as a rite associated with the classical tradition of payment to Charon to ferry the dead across the River Styx to the Underworld realm of Hades (Barber & Bowsher 2000, 120). It is possible that these flints represent a symbolic substitution for a coin, that they were meant to stand as payment for Charon's fee, as suggested for two burials at Crowmarsh (Oxfordshire) and South Cadbury (Somerset) with flints found in the mouth (Henig & Booth 2000, 133; Davey 2004, 50). Unless the placement

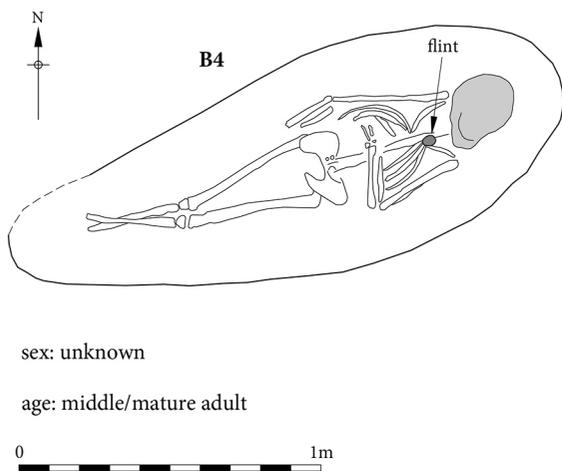


Fig 15 (above). Extended Burial 4 with a disc-shaped flint on the chest (scale 1:25)

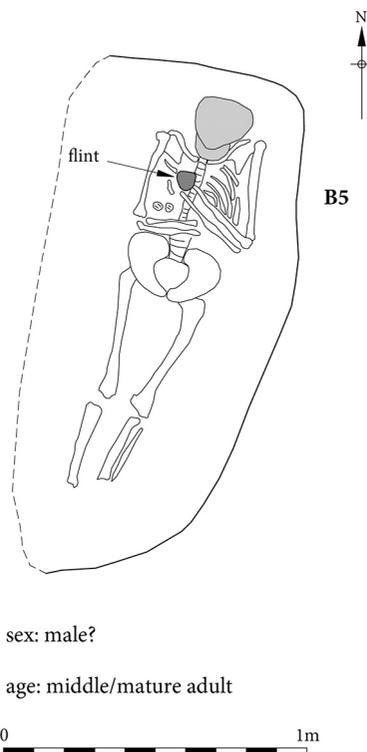


Fig 16 (right). Extended Burial 5 with a disc-shaped flint on the chest (scale 1:25)

is obvious, or a pattern emerges from more than one burial, it is likely that offerings of this type will be missed during excavation and are perhaps, therefore, under-represented in the archaeological record.

Another potentially overlooked find in the context of burial is shell. The shell, or shell motif was symbolic of rebirth and has been found in funerary contexts as a decorative motif on lead coffins (Barber & Bowsher 2000, 180–1, 322; Barber & Hall 2000, 109). A connection to the saviour god Bacchus is also possible in that the shell either represents the pearl, or a container for the pearl, which in turn is the symbol for the soul (M Henig & J Gerrard, pers comm). Two burials contained oyster shells, seemingly deliberately placed and thus possibly symbolic (B5 & B6). In B5 (Fig 16), one of the two graves also containing a flint disc, the oyster shell was located under the left hand and right arm. In B6 an oyster shell was placed beside each of the ceramic vessels, including the miniature jar, at the head and foot of the grave (Fig 11).

Discussion: the Crispin Street Roman burials in their local context

The demography and pathology

Natasha Dodwell and Kathelen Sayer

Of the 36 burials 12 were identified as male and seven as female (Table 1). The remaining 17 were indeterminable, largely due to poor preservation or truncation. The ratio of males to females in the Crispin Street sample was similar to that seen in the eastern cemetery (1.7:1), a ratio that is thought to represent a normal urban population rather than being indicative of a military presence (Barber & Bowsher 2000, 279, 313–14).

The majority of the burial sample could be classified to age group, although the fragmentary nature of the remains meant that a small number could only be broadly categorised as adult (Tables 1 & 2). As the sample is small it is not clear if the ratios identified reflect the broader population buried in the northern cemetery. However, in common with what was observed at the eastern cemetery the most frequent age of death in the Crispin Street sample was between 26 and 45, followed by young adults

Table 2. Age distribution for the 33 burials where it could be determined

Age group	Years	No. of individuals
Juvenile	5–11	2
Subadult	12–18	2
Young adult	19–25	9
Middle adult	26–44	7
Mature adult	45+ years	1
Middle/mature adult	26–45 +	8
Adult	19–45 +	4

aged 19 to 25 (middle/mature adult = Age group 5; young adult = Age group 4; Barber & Bowsher 2000, 278). There were also more females than males represented within the young adult age group, again similar to what is seen elsewhere, although it is not clear why this would be the case (*ibid*, 279).

The absence of infants and the presence of only two juveniles is notable, but appears to be mirrored in many formal Roman cemeteries. At the eastern cemetery the proportion of infants was found to be far below that which would be expected from a representative burial of a normal population (Barber & Bowsher 2000, 279). In classical civilisation children were not considered to be full members of society and as such were not always provided for in death in the same way as adults were. It has been suggested that those children included in the eastern cemetery were present either as the result of the higher status of their parents, or because there was an increased trend for infants to be buried alongside adults through the 3rd and 4th centuries AD (*ibid*, 312–13). However, it seems likely that this under-representation probably reflects the less formal way in which the majority of deceased Roman children were disposed of. Differential disposal of infant and adult remains was not uncommon in a Romano-British context outside London, with the former frequently being placed in houses and buildings under thresholds (Phillpotts 1991, 97–102).

Analysis of the data from the northern cemetery indicates an under-representation of child burials. However, this absence is not seen in all of the London cemeteries, specifically at Great Dover Street and more

recently at Lant Street, both in Southwark (Mackinder 2000; Ridgeway *et al* 2013, 15, 20, 23, 109–10). The reason for this discrepancy is unclear, but at the former site, where children make up over 40% of the cemetery population, the high number might be attributed to the higher status of those interred or to ideological differences.

The diseases most commonly recognised in archaeological material, namely joint and dental disease, were also recorded in this assemblage. However, meaningful prevalence rates could not be calculated as a result of the size of the sample and condition of the material.

Comments can be made regarding observed fractures and the evidence for decapitation. Four individuals, B26, B18, B19 and B33, had suffered breaks, all of which were well healed or in the process of healing although only the former had good realignment. Burial 26, B18 and B33 had fractured clavicles and B19 a fractured fibula. Breaks to the clavicle most frequently occur during a fall, and the fracture to the fibula is likely to have been caused by a direct force or the twisting of the leg whilst the foot was held solid (Conheeny 2000, 285).

Status and society

By the 3rd century AD *Londinium* was a place of competing religious doctrines. Cults and religions thought to have a following included Christianity, various classical gods and goddesses including Isis, Minerva, Mithras, Venus and a ‘mother’ deity, plus the divinity of the emperor (Barber & Bowsher 2000, 318). The heterogeneous character of the eastern cemetery of London, with its range of burial rites and funerary practices, has been suggested to mirror a population that was equally diverse in life (*ibid*, 330). Indeed, the choice of burial rite used for a particular individual may have depended not only upon their religious beliefs but on many factors including wealth, fashion, social status, occupation, cultural tradition and legal requirement (*ibid*, 309).

Social status is generally very difficult to identify in the excavated record (Barber & Bowsher 2000, 329; Philpott 1991, 229). The use of a ceramic lid as a platter in B15, or of a rounded flint in place of a coin as in B4

and B5, could be taken to reflect the limited means of the deceased or of the mourners. In a conventional sense these burials may be considered ‘poor’, although this could be placing a false significance on the actual objects and ignoring their symbolic function. There was also no trace of grave markers, walled cemetery enclosures, or superstructures such as *mausolea*, which have been taken to denote the presence of high-status burials in the western and southern cemeteries of London (Mackinder 2000; Shepherd 1988). It is possible, although perhaps unlikely, that any structures of this nature that once existed have since been truncated or their masonry robbed out. Robbed out sarcophagi, a *mausoleum* structure, a complete stone sarcophagus and a decorated lead coffin were recovered to the north of the site at 280 Bishopsgate (Barber & Hall 2000, 109). Clearly the Crispin Street burials will need to be included in the future study of the remaining data from the northern cemetery. The detailed comparison of burial rites across the various areas of Roman London’s cemeteries would be a useful future avenue of research.

THE OUTER PRECINCT OF THE MEDIEVAL PRIORY AND HOSPITAL OF ST MARY SPITAL

Background

In the medieval period the western side of the site lay within the parish of St Botolph Bishopsgate, and the eastern half lay within the parish of Stepney. The parish of Stepney was based on the Bishop of London’s manor of Stepney, while the parish of St Botolph developed along the main road running northwards from the City of London at Bishopsgate (Thomas *et al* 1997, 14, 124) (Fig 17). The main roads from Bishopsgate and Aldgate were linked by a minor road called Berewards Lane or Hogge Lane, which ran south-eastwards along the line of the western part of Artillery Lane, Sandys Row and Middlesex Street. To the east of St Botolph’s parish lay Lollesworth Field, a large tract of agricultural land, part of the demesne lands of the bishop’s manor of Stepney, that subsequently became known as the Spital Field (*ibid*, 15).

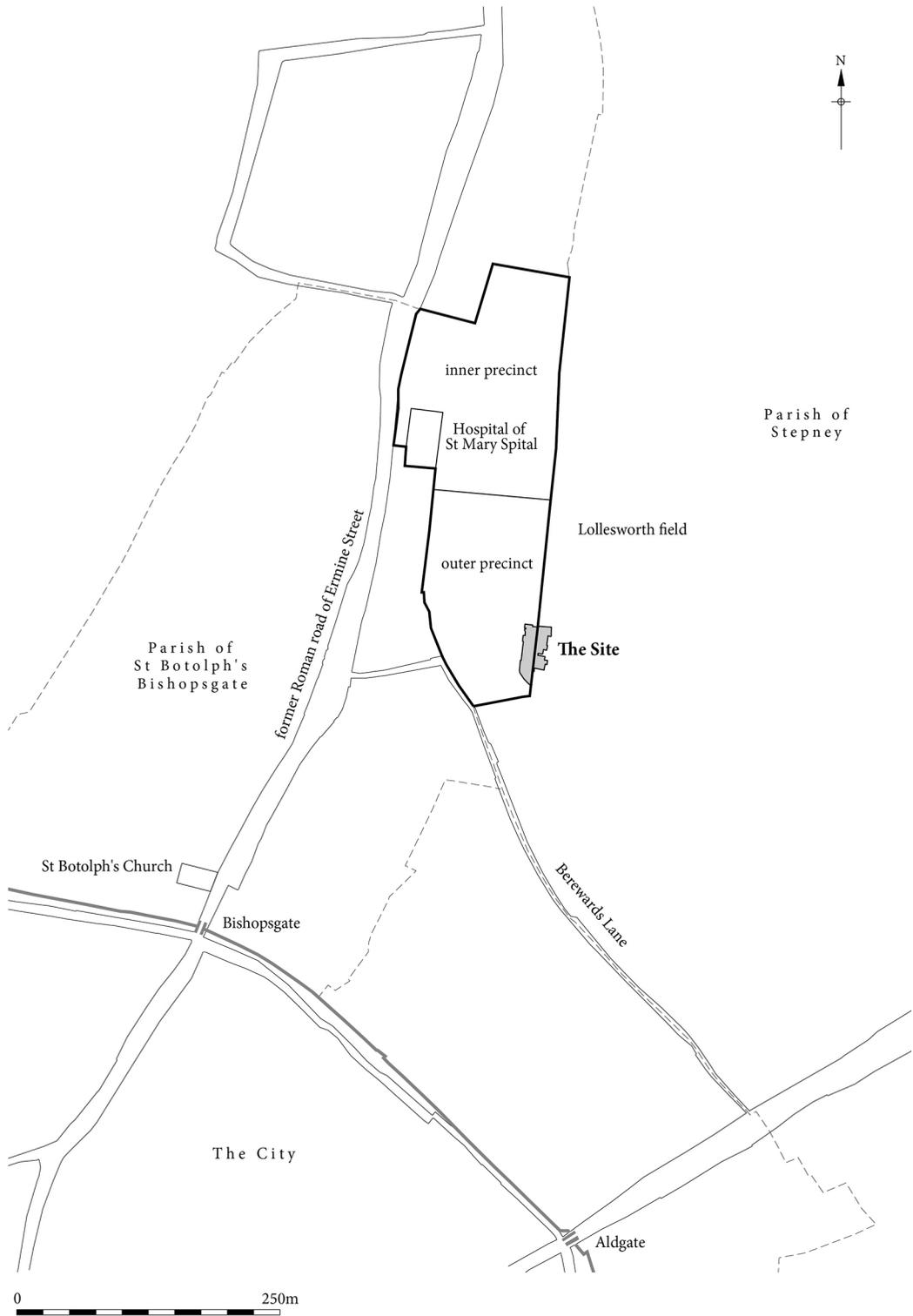


Fig 17. The site in relation to the inner and outer precincts of St Mary Spital (scale 1:6250)

In the north-eastern corner of St Botolph's parish, on the manor of Norton Folgate, the Augustinian Priory and Hospital of St Mary Spital was founded during the late 12th century. The initial precinct was relatively small and centred around Spital Square, but when the priory was refounded in 1235 its extent was substantially increased. During the early 13th century the priory acquired a series of plots of land lying to the east of the Bishopsgate frontage. By 1270 these properties formed an outer precinct, lying to the south of the conventual buildings and cemetery, to be used primarily for horticultural purposes (Thomas *et al* 1997, 19–20, 26, 99). The inner and outer precincts stretched from west to east from the modern-day streets of Bishopsgate to Nantes Passage and from south to north from Artillery Passage to Fleur-de-lis Street (Holder 1997, 11, fig 19). During this period the western side of the site lay within the outer precinct and the eastern side without the precinct on the edge of Lollesworth Field (Fig 17).

There is no documentary evidence concerning the form of the outer precinct boundary, but its eastern side is likely to have been marked by a ditch and bank. Walls were built along the northern part of the western boundary, but the boundary between the priory and Lollesworth Field further to the north was a 'mudde walle' until the 16th century (TNA, C66/719 m11). In the vicinity of Spital Square (SQU94), excavation confirms that the boundary was represented by a brickearth bank, with a substantial ditch on its western side; the bank and ditch probably continued southward to form the eastern boundary of the outer precinct, although no evidence for the ditch appears to have been identified on the adjacent site.

In the early 13th century an agreement was made between Prior Godfrey and the rector of St Botolph, dividing up the ecclesiastical rights and profits of the area. The agreement was endorsed by the Dean and Chapter of St Paul's Cathedral. The parochial rights of tithes and burials within the 'territory and court' of the priory between Shoreditch parish in the north and Berewards Lane in the south and from Bishopsgate Street in the west to Lollesworth Field in the east were allocated to the priory. This area, therefore, became extra-parochial. The prior paid the

rector an annual compensation payment of 10 shillings for the area he had resigned, a payment which was still current in the 1530s (Dugdale 1830, 6, 625; *Val Eccl* 1, 401).

A small number of monastic outer precincts have been archaeologically investigated. These include Waltham Abbey (Essex), Fountains Abbey (Yorkshire) and Thornholme Priory (Lincolnshire) where evidence for mills, barns, cattle byres, dovecotes, steward houses, granaries, smithies, malshouses, brew-houses and woolhouses have been revealed (Coppack 1990, 109–20). The priory and hospital buildings of St Mary Spital and elements of the cemetery at Spital Square have been extensively excavated (Thomas *et al* 1997; SPM96). An area to the west of the outer precinct has also been excavated at 250 Bishopsgate (STE95). A series of ditches were revealed subdividing sectors of the precinct into separate plots, apparently defining different activities. Some of these plots were used for pit digging and rubbish disposal, some for horticulture, whilst others contained timber structures or stone buildings (Holder 1997, 11). The large assemblage of animal bone recovered from these plots may indicate that some form of animal husbandry was taking place in the vicinity (Thomas *et al* 1997, 99). The evidence of primary butchery waste from 12th- and early 13th-century deposits outside the hospital precinct suggests that animals were being slaughtered nearby, or perhaps that butchers based in the city were dumping their waste within this area (*ibid*, 128).

The outer precinct boundary

Towards the west of the site a large ditch (D2) orientated north to south was identified. It truncated the Roman cemetery soil and a number of graves (Fig 18). The ditch extended across the entire site over a length of c.53m, extending beyond the limits of the excavation both to the north and south. This feature was at least 3.5m wide and it was recorded in section as having a maximum depth of 1.35m, although it was probably originally cut from much higher in the sequence. The ditch was characterised by steeply sloping sides falling to a concave base with a lowest level of 9.96m OD (Figs 18 & 19). This ditch represents the earliest post-Roman activity identified on site.

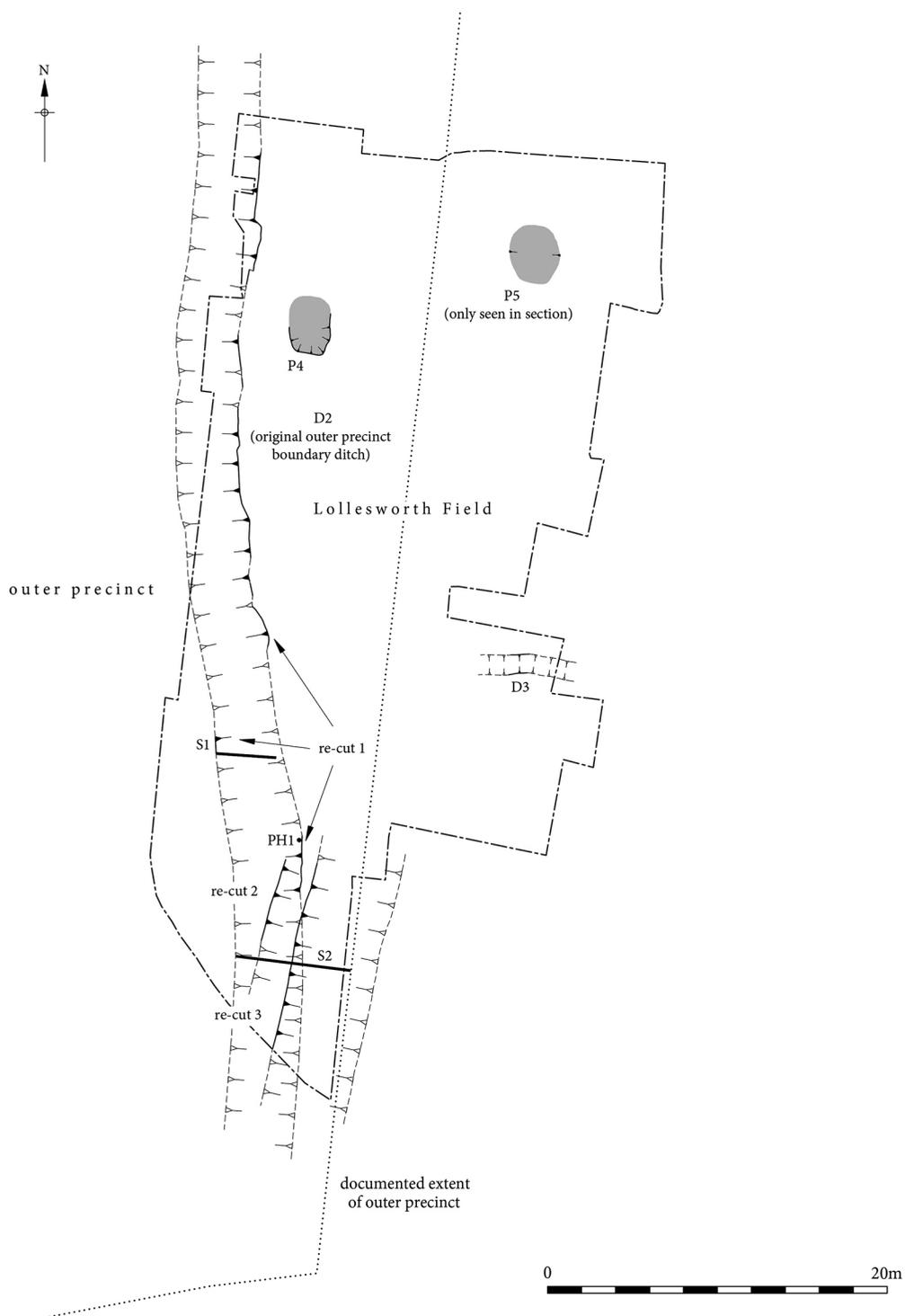


Fig 18. Medieval features: ditches (D2 & D3), pits (P4 & P5), a posthole (PH1) and the location of the two ditch cross sections (S1 & S2; see Fig 19) (scale 1:400)

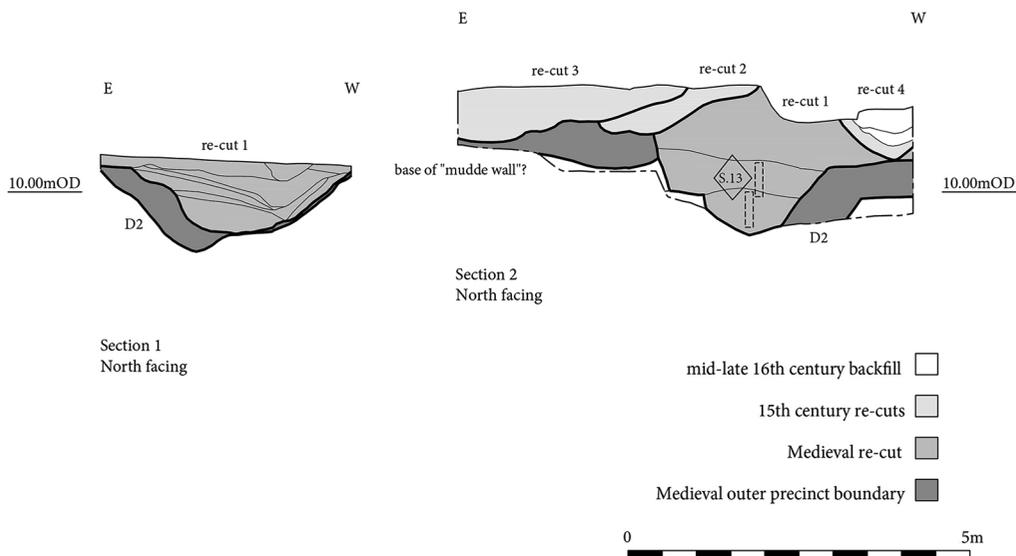


Fig 19. Sections 1 and 2 through Ditch 2 and remnant of earth bank or 'mudde walle' showing the location of the column samples (for location of these sections see Fig 18) (scale 1:110)

The small assemblage of pottery from the backfill of the original cut of Ditch 2 comprises London-type ware dated from 1080 to 1350, Kingston-type ware dating from 1230 to 1400 and Coarse Border ware dated 1270 to 1500 (see Jarrett PDF supplement). This combination of fabrics suggests a deposition date of *c.*1270 to 1350, although the presence of a Coarse Border ware bowl with a flat-topped rim from the basal fill post-dating *c.*1340 would suggest that Ditch 2 was not being filled in until the middle of the 14th century.

This ditch was clearly a substantial feature and it is likely to have demarcated a property boundary. Taken together with the documentary sources and archaeological evidence from Spital Square (SQU94) to the north, the alignment and positioning of Ditch 2 demonstrates that it represents the outer precinct boundary to the Priory and Hospital of St Mary Spital. The inclusion of late 13th- and 14th-century pottery in the initial fills of the ditch confirms the documentary evidence that the outer precinct had been established by *c.*1270. The documentary record and excavations at Spital Square to the north identified an earthen bank ('mudde walle') to the

east of the ditch demarcating the edge of Lollesworth Field. At the Crispin Street site this medieval deposit was only seen under the artillery wall in section (Fig 19, section 2).

Later recuts of the ditch

Although perhaps first dug during the 13th century, this ditch was frequently recut, suggesting that the boundary marked by Ditch 2 was maintained over a prolonged period before being completely infilled in the 16th century (see below). The first discernible recut (Fig 19) produced no pottery, although a column sample (S.13) taken through the lower two fills of the recut ditch produced very good pollen results indicating that the local environment was dominated by willow and grasses (*ie* pasture) (see Branch PDF supplement).

Truncating the base of the recut was a circular posthole measuring *c.*0.22m in diameter and 0.15m in depth with steeply sloping sides falling to a concave base (PH1). A single posthole is difficult to interpret, but it may have been part of a revetment or a palisade-type structure.

The subsequent recuts indicate a slight

realignment of the original ditch, including two sequential cuts located slightly to the east (Fig 18). The backfill of the first contained Coarse Border ware and Late London-type ware indicating a deposition date of 1400 to 1500. The fill of the following recut produced sherds of Kingston-type ware jugs, but also a Coarse Border ware bowl with a flat-topped rim and Cheam ware dish suggesting a date from 1350 to 1500. Another smaller recut truncated the backfill of the original recut to the west of Ditch 2 (Fig 18, D2). Its basal fill included Coarse Border ware, Tudor Green ware dating to 1380–1500 and Late London ware, indicating a deposition date of 1400 to 1500. These assemblages, although small, suggest that the boundary ditch was being regularly cleaned out and maintained into the 15th century.

Activity within the outer precinct

Most of the site lay to the east of the boundary ditch and thus no evidence was revealed of activities within the outer precinct (Fig 18). Analysis of the finds recovered from the precinct ditch or found residually within later features provides limited information about activities taking place in the vicinity, although nothing that can be linked with the priory.

Worn fragments of decorated medieval floor tile, including Penn types dating to the 14th century, were recovered from the backfill of the ditch. Medieval roof tile was also retrieved in some quantity, including a small number of early 12th- to 13th-century examples (MoL fabrics 2273, 3228). The early date and nature of the material suggests an origin within the priory complex, perhaps from remodelling or repair work. The majority of the medieval animal bone assemblage is typical of domestic waste, although the fill of Ditch 2 included part of a horse skeleton and a bone probably intended for pin making (see Yeomans PDF supplement).

The fills of successive recuts of the ditch also produced part of an adult leather shoe, <SF59>, and a 'D'-shaped iron buckle, <SF48>, tentatively identified as part of a horse harness. The fragment of shoe, an upper from a side lacing style popular from the 13th to later 15th century, probably

represents cobbling waste (see Mould PDF supplement) and as such could signify that shoemaking was being undertaken in the vicinity. From the late 14th century onwards there were organised drives of cattle to the London markets (Grew & de Neergaard 1996, 46). Ermine Street would have been one of the major thoroughfares into London for such drives. These would have ensured a constant supply of cattle hides for leather-workers as well as meat for butchers and the raw material for horners and bone-workers.

LOLLESWORTH FIELD

Outside the precinct the archaeological evidence suggests that Lollesworth Field was used as pasture and sporadically for the quarrying of brickearth and gravel (Fig 18). An east–west ditch (D3) was recorded to the east of the site with a truncated length of 1.06m, a width of 1.10m and a depth of 0.14m. The cut was characterised by sloping sides falling to a slightly concave base and was filled with a mid-grey silt with frequent inclusions, coarse grit and occasional charcoal flecks. The pottery, including sherds of Coarse Border ware and Late London slip ware, suggests the ditch was backfilled between c.1400 to 1500. The ditch may have been excavated as a boundary or to improve the drainage of land, perhaps for the purpose of grazing or broader agricultural use.

In the north-east part of the site, a layer of mottled yellow/brown clayey sandy silt measuring 2.60m by 1.20m and between 0.10m to 0.15m thick was found overlying the cemetery soil. This had been disturbed by bioturbation and was interpreted as an agricultural soil. The remains of two large pits were also recorded here (Fig 18). The first was located towards the north-west corner of the site, c.3m to the east of the outer precinct ditch (P4) and the second (P5), measuring c.3.0m across, in Area 8 (East) to the north of the site. Pit 4 bottomed out on the underlying gravel, and the size and lack of finds suggest it was dug for the extraction of brickearth. The primary fill of Pit 5 contained a few sherds of Coarse Border ware and Dutch redware dating from 1300 to 1500 and the base of two relief-decorated glass beakers (see Shepherd PDF supplement). The beakers were probably

imported from northern Europe and are thus of some rarity. Although not directly attributable to the priory, it represents a probable source for these vessels. This feature is similarly thought to have been a brickearth quarry.

Three French jettons dating from the 14th to 15th century were also recovered from the area of the Lollsworth Field (see Gaimster PDF supplement). These jettons were used as reckoning counters or tokens, not as coins. Similar examples have been recovered from excavations within the inner precinct of the priory (Egan 1997, 207). The jettons are likely to represent casual losses, although as items of commerce they attest to the importance of France in English trade during the late medieval period.

THE 1538 DISSOLUTION AND THE HONOURABLE ARTILLERY COMPANY

Background

By the early 16th century the Priory of St Mary Spital was probably leasing its outer precinct to tenants. In January 1538, shortly before the surrender of the house in 1539 as part of the Dissolution of the monasteries, William Major, the last prior, leased it to the master, rulers and community of the Fraternity or Guild of Artillery of Longbows, Crossbows and Handguns, for three consecutive 99-year terms (Thomas *et al* 1997, 130–2). This was the Fraternity or Guild of St George, which had been granted a charter of incorporation in August 1537 and is the ancestor of the Honourable Artillery Company. At this time the precinct was known as the Teasel Ground, presumably because teasels were grown there for wool-carding. The lease described it as ‘nowe enclosede and wallede wyth newe brycke walle’ on the east, south and west sides, and enclosed to the north presumably by a fence (GHL 1931, 367–70). It is likely that the Company had constructed the walls itself, before taking the lease of the area. The ditch alongside the boundary bank of the precinct may have been infilled at this time and the bank flattened. The new brick boundary wall was then built along the course of the old bank.

The freehold of the Teasel Ground was granted to John Dudley, Earl of Warwick,

in May 1550, but it returned to Crown ownership at the accession of Queen Mary in 1553. Both the Artillery Company and the gunners of the Tower of London made use of this enclosure to practise with large and small artillery; the precinct therefore became known as the Artillery Ground or Garden. The Artillery Company remained active there until 1658, when it moved to its present home at the New Artillery Ground at Finsbury in Islington; the Tower gunners of the Ordnance Office retained the old Ground until 1682. Following the dissolution of the priory in 1539, the area of the former outer precinct remained extra-parochial, and later became the Liberty of the Old Artillery Ground; it stayed outside the parish system to some degree until 1900 (Thomas *et al* 1997, 124).

Ordnance accounts of the 17th century make it clear that the boundary walls were maintained by the Ordnance Office, based in the Tower of London. They record the construction of a brick wall with 4,500 bricks in 1612, and a fence of 67 deal boards with posts and rails in 1623 (TNA, WO49/41 fol 6; WO49/52 fol 225v; WO49/53 fol 28). A survey of the Artillery Ground in December 1658 found that it was surrounded by a brick wall 12 feet (3.66m) high, enclosing an area of four acres three rods ten perches (*c.*1.65 hectares) (*Cal SP Dom* 1658–1659, 234; TNA, SP18/84 no. 84; WO47/4 fol 223). In January 1663 the wall was repaired in the vicinity of the old proof house in the central part of the eastern side, a little to the north of the excavated site; recycled bricks were used for the work (TNA, WO47/5 fol 1).

In March 1681, a measured survey of the Ground was ordered by the Board of Ordnance and the royal council (TNA, WO47/9 fol 131; WO47/10 fol 65), this apparently resulting in the drawing of a plan (TNA, MPE1/503, reproduced at SoL xxvii, pl 54c). This shows the Ground shortly before streets were laid out across it. The gun range was on the eastern side, stretching from a gun platform at the south end to the butts at the north end, 235 yards long and 12 yards wide (214.9m x 10.9m). At its sale in 1682, the Ground was measured at 5 acres 1 rood (*c.*2.12 hectares) and completely surrounded by a brick wall, which was included in the sale (TNA, C66/3232 no.

6). The evidence from excavations at 250 Bishopsgate (STE95) suggests that this area was used for horticulture, but also for artillery practice evidenced by the recovery of numerous musket balls and fragments of shot (Holder 1997, 13).

To the east of the Artillery Ground wall, parts of Lollesworth Field, or Spital Field as it became known, were quarried for brickearth throughout the 16th century (Thomas *et al* 1997, 102, 133). The first search and view book of the Tylers' and Bricklayers' Company at Guildhall Library notes the activities of brick-makers in Spitalfields between 1620 and 1648 (GL, MS 3047/1). It is not certain where within the Field these brickearth pits were dug. The 'copperplate' map of 1559 shows the land adjacent to the Artillery Ground being used for recreation (archery, promenading) and apparently as a toilet too (Fig 20). During the mid-17th century the area of the site outside the precinct wall was

still open ground and used for the grazing of cattle (Thomas *et al* 1997, 150).

The Artillery Ground

During the 16th century the medieval outer precinct boundary ditch appears to have been deliberately infilled. The property division marked by the boundary ditch was maintained, with the construction of a brick wall immediately to the east. Elements of this brick wall were recorded incorporated into the build of a later house. Although much restored, the line of this wall would remain an important property division throughout the post-medieval period and continued to define the parish boundary.

The upper sections of the final recut of the precinct boundary ditch appear to have been backfilled during the mid to late 16th century (Fig 19). The pottery recovered from the two upper fills included Late

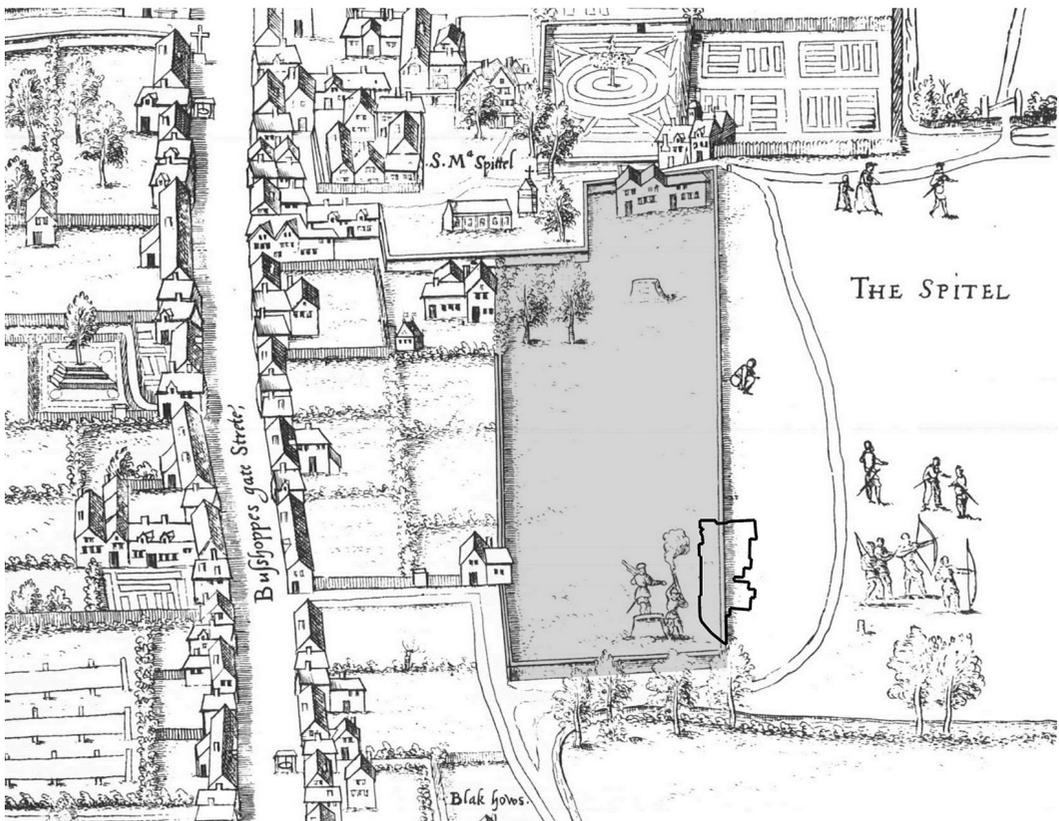


Fig 20. The site on the 'copperplate' map of 1559

London ware, Saintonge ware, Tudor Green ware and early post-medieval redware, but a sherd of Border ware from the lower fill suggests a deposition date of post-*c.*1550. While a sherd of post-medieval redware from the uppermost fill implies final infilling after *c.*1580. The recovery of a Nuremberg jetton, <SF5> from fill [96], corroborates a mid to late 16th-century date (see Gaimster PDF supplement). In addition to pottery both deposits contained moderate to frequent charcoal and oyster shell, crushed mortar, fragments of ceramic building materials and animal bones, indicating that the ditch was being used as a refuse dump. The green hue present in both these deposits suggests a high faecal material content, confirming the usage of this area for disposal of human waste as indicated on the 1559 ‘copperplate’ map (Fig 20). A copper-alloy needle, <SF8>, and a fragment of an iron horseshoe, <SF10>, were also recovered from these deposits.

Elevations of what is considered to represent the same north–south aligned wall were seen to the very north and south

of the site. To the south, made out in a west-facing elevation, the wall was built in local red handmade bricks (MoL fabric 3033; see Brown PDF supplement) (Fig 21). It stretched over a distance of 10.40m and stood up to *c.*1.90m high with a top level of 13.24m OD. To the north of the site a further 1.76m section was noted, with both sections having been built within a foundation trench. To the north, post-pipes within the foundation cut and sealed by the backfill suggested scaffolding was used in its construction (Fig 22).

The wall continued to the north and south beyond the limits of excavation and appeared to have originally extended right across the site. The fabric and construction are consistent with a Tudor date, and taken together with its location and alignment indicate that it represents the remains of the ‘newe brycke walle’ constructed by the Honourable Artillery Company in the late 1530s. As the trench was not completely backfilled until after *c.*1550 or 1580, this implies the earlier boundary ditch remained partially open at the time of construction.



Fig 21. Elevation of the surviving length of the Artillery Field wall incorporated into the cellar of Building 1 and the modern party wall, view looking east (for location see Fig 22) (2.0m scale)

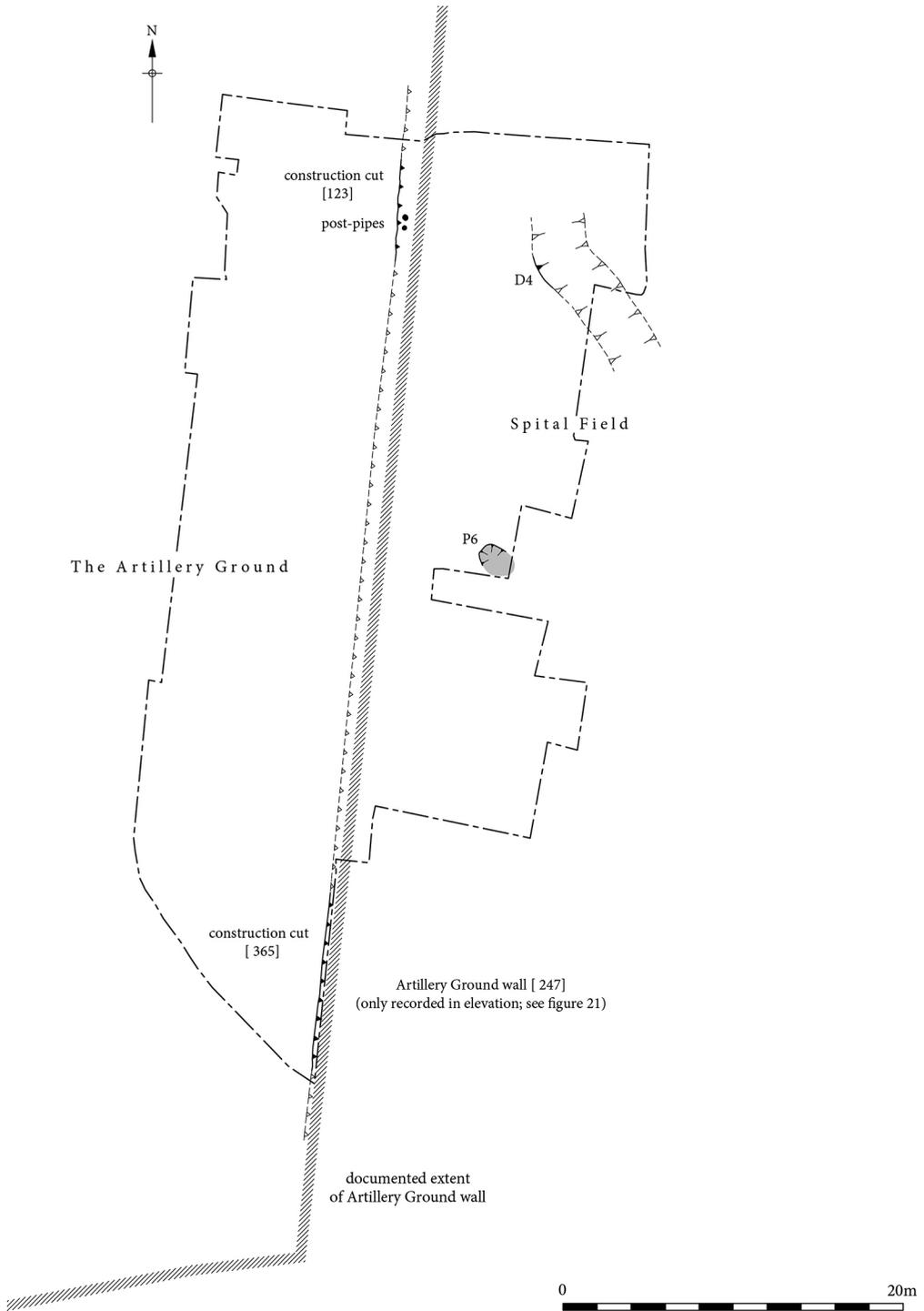


Fig 22. Plan of the various 16th-century features, including the Artillery Ground wall, foundation trench [123] and [365], associated postholes, Ditch 4 and Pit 6 (scale 1:400)

As the wall was built slightly to the east, over the projected line of the associated earthen bank, this does not present a problem. The addition of post-Great Fire bricks (MoL fabrics 3032 & 3034) and reused Tudor bricks suggest sections of the wall were maintained or rebuilt for varying purposes through the late 17th and 18th centuries.

Until 1682 the outer precinct remained almost continually under control of the Artillery Company and the gunners of the Tower of London for the purpose of artillery practice. However, in contrast to the findings at 250 Bishopsgate (STE95) no archaeological evidence relating to its use as a firing range was found. To the east of the wall lay the Spital Field where a sub-circular pit was identified (P6) (Fig 22). The pottery recovered from this pit suggests that it was backfilled during the 16th century, possibly linking it with the documented brickearth quarrying taking place on Spital Field during this period. Its backfill also contained fragments of charcoal, ceramic building material, oyster shell and a sherd from a whiteware crucible that contained a non-ferrous metalworking residue. Although perhaps dug for brickearth, the pit subsequently seems to have been used for the disposal of rubbish. Industrial ceramics of 16th- and 17th-century date associated with non-ferrous metal working have also been recovered from the backfill of the city ditch at Cripplegate (Pearce 2001, 22–3).

To the east of the boundary wall were the remains of another ditch (D4) (Fig 22). It was 2.60m wide and 0.45m deep and, although truncated to the south, it continued beyond the limits of the excavation to the north and east. It may have been dug to assist with drainage of the field. The ditch contained pottery dating from c.1580 to 1600. The articulated remains of part of a horse were also recovered from the ditch, suggesting that this area was still being used to dispose of animal carcasses.

These features corroborate the documentary evidence that this area of Spital Field remained open and was used for both quarrying and agriculture during this period. Significant, but residual, finds dating to this period included a silver penny of Elizabeth I, <SF38>, and a late 16th-century lead token, <SF3> (see Gaimster PDF supplement).

POST-MEDIEVAL RESIDENTIAL AND COMMERCIAL DEVELOPMENT

Late 17th century

During the last few decades of the 17th century the modern street alignment appears to have been established and the site developed for residential purposes and small-scale manufacture. The Tudor Artillery Ground wall was retained demarcating the back boundary for properties fronting on to Crispin and Gun Streets and forming an external side wall to a building excavated on Artillery Lane to the south.

The development of Crispin Street

During the early 17th century Lollesworth Field passed into the ownership of the Wheler family. The property remained almost entirely open ground until the 1650s, but by 1675 various parts of the estate had been developed with small cheap houses and, as part of this process, brick making took place close to the areas of development. Between 1668 and 1670 Edward Nicholas and George Cook, trustees of the Wheler family, built houses and leased plots for building resulting in the construction of the western side of Crispin Street. The rear gardens of these properties ran up to the perimeter wall of the Artillery Ground. One of the plots was leased for 80 years to John Pike, a bricklayer of Stepney. It had a street frontage of 36 feet (10.97m), a depth of 100 feet (30.48m) and extended back to the wall; it was the site of no. 50 Crispin Street, in the north-east part of the excavated area (LMA, MDR 1730/3/377). The next properties were leased to William Savill, carpenter, also for a term of 80 years. The frontage here was 100 feet (30.48m) stretching back to the Artillery Ground wall; it was the site of five houses, corresponding to nos 42 to 46 Crispin Street, to the south of the present line of Brushfield Street (LMA, MDR 1726/2/2) (Fig 23).

To the south of Pike's houses a fenced plot was leased to the Hamlet or community of Spitalfields in November 1669 by Samuel Reeve, who had presumably leased it from Nicholas and Cook. Towards the south end of this plot the Hamlet built a *Town Hall* or *Town House* in 1668–1669, for holding its meetings with the ground floor used as



Fig 23. The site on Ogilby and Morgan's map of London of 1676

a watch house and prison (SoL xxvii 137; LMA, MDR 1745/1/91; TH, L/CCS/1/1 pp 109, 112, 116; L/CCS/1/2 pp 25–6, 118) (Fig 23). In 1670 in the central part of the plot six almshouses were built, for the benefit of the poor of the Hamlet (SoL xxvii 137; TH, L/CCS/1/1 p 111; L/CCS/1/2 p 104). Part of the plot to the west of the almshouses and Town House was let for building to William Lee, joiner, in January 1670 where he built four houses, later called Dolphin Alley or Court (LMA, MDR 1715/2/50; TH, L/CCS/1/1 p 112). The date of the initial construction of the houses of Smock Alley at the southern end of the site is not known, but they were probably built before 1669 (CLRO, Misc MS 22.9). The new houses of Crispin Street, Smock Alley and Dolphin Alley, including the Spitalfields almshouses and Town House appear on Ogilby and Morgan's map of London of 1676 (Fig 23).

Archaeological sequence

To the east of the precinct wall, a 'garden soil' horizon rapidly accumulated, demonstrating the dumping of domestic refuse and possibly cess (night soil). This deposit varied in composition across the site, measuring up to 0.98m thick with a highest level of 12.58m OD, and it contained pottery dating from the mid to late 17th century and clay tobacco pipes dating from 1660 to 1680. Other finds from these deposits included a Charles I rose farthing dating to the late 1630s, <SF37>, and a corroded halfpenny token, <SF1>, dating from c.1648 to 1672, a partially articulated pig skeleton (see Yeomans PDF supplement), as well as a polychrome cylindrical glass bead, <SF7> (Fig 24).

Cutting through the 'garden soil' was a heavily truncated curvilinear feature (D5) (Fig 25), measuring 1.20m by 0.60m. A single sherd of post-medieval fine redware dated to the 17th century was recovered from its



Fig 24. Polychrome cylindrical glass bead <SF7> from the 17th-century garden soil (diameter 6mm and incomplete length 9mm)

fill. It may have once formed part of a hedge line. Immediately to the north was a line of five small circular cuts (Fig 25), possibly representing planting or postholes. A series of oval rubbish pits and a possible post pit were also recorded in the north-east portion of the site (P7–P13) (Fig 25). Finds of pottery and clay tobacco pipes suggest that these features were backfilled between 1660 and 1690. Late 17th-century pottery types include Tin-glazed ware with ‘chinamen among grasses’ decoration and Staffordshire-type slipware. However, a small number of early 17th-century vessels, including a Tin-glazed ware charger with ‘Wan-li’-style decoration and a Westerwald stoneware biconical panel jug, indicate that some of the pottery was old when it was deposited.

The pottery and faunal assemblages

recovered from these pits included domestic refuse and craft activity waste products (see Jarrett PDF supplement). These pits also contained the remains of five dogs and three cats and significant quantities of cattle horn cores, a waste product associated with butchery, tanning and horn working (see Yeomans PDF supplement). A smithing hearth bottom from Pit 7 may indicate the presence of late 17th-century iron working in the vicinity (see Gaimster PDF supplement). Two fragments of muffle (part of the inner kiln wall) from Pit 8, and finds of possible clay pipe wasters from elsewhere on site, confirm that clay tobacco pipe manufacture took place nearby between c.1660 and 1680 (see Jarrett PDF supplement). The presence of four late 17th-century clay tobacco pipes with unusual diamond-shaped heels may further attest local production and innovation.

This industrial activity to the east of the Artillery Ground wall was probably associated with the houses fronting on to Crispin Street. The late 17th-century construction date suggested by the archaeological evidence ties in with the documented construction of houses by John Pike, on the north-east part of the site. In March 1669 John Pike was digging for brickearth to make bricks for the three houses he was building on this plot, but his pits were undermining the foundations of the east wall of the Old Artillery Ground. No trace of any quarrying could be attributed to this phase, nor was there any evidence for a brick clamp. The latter is perhaps unsurprising as it would appear the Privy Council forbade him from setting up a brick-kiln because of the potential impact on the nearby tenter grounds to the east and the danger of sparking gunpowder stored in the adjacent Ground. He was thus instructed to carry the brickearth further afield to turn it into bricks (CLRO, Misc MS 22.9; TNA, PC2/61, 225, 239, 240, 261).

The horticultural-type soils and planting holes show that the backyards of these properties were used as gardens, and the possible hedge line may represent a property boundary between the house fronting on to Crispin Street and the almshouses or backyards of the buildings of Dolphin Alley to the south. The pig skeleton indicates that swine were also being kept in the backyards

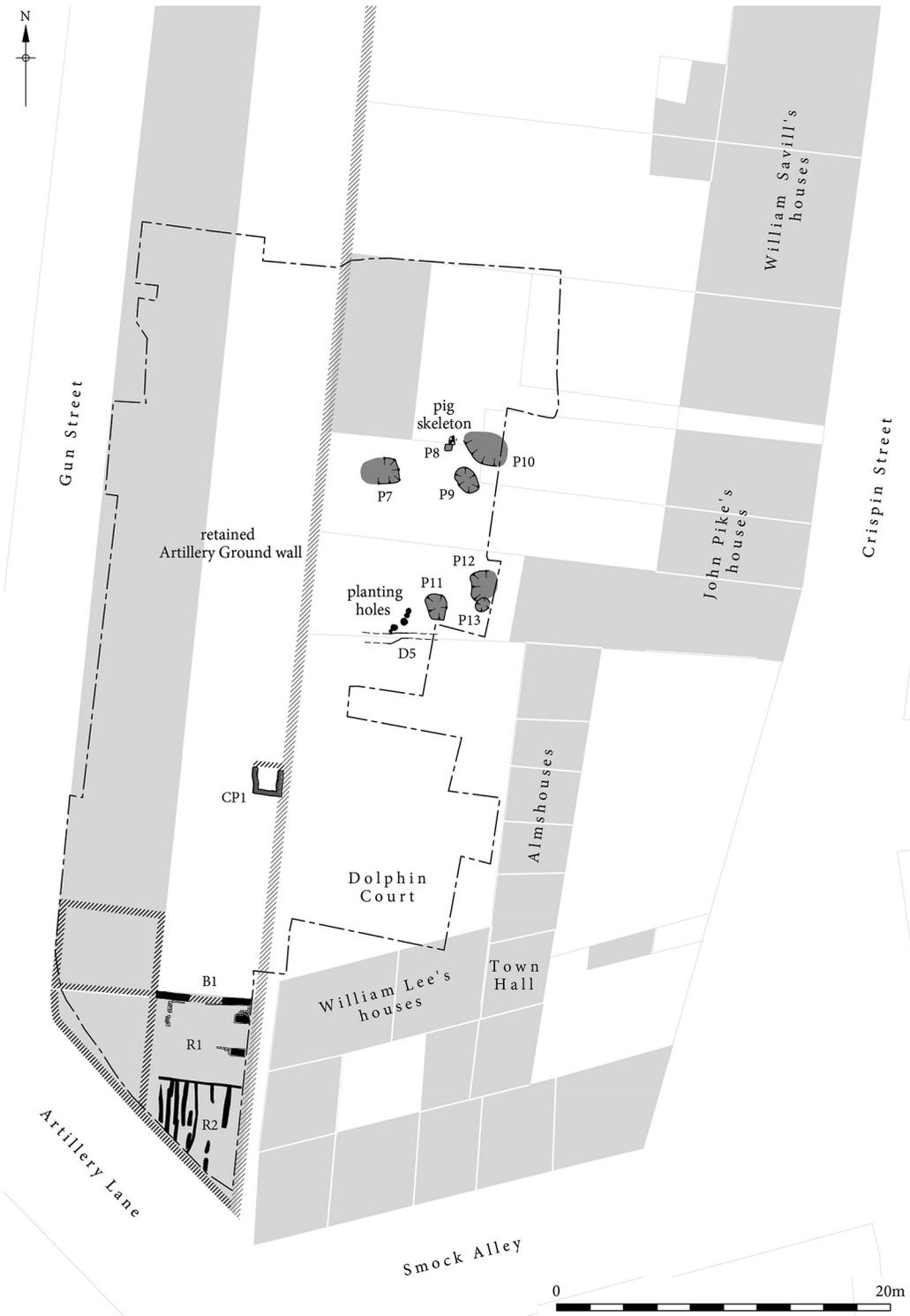


Fig 25. The late 17th-century features; the conjectured extent of the built up area is taken from Ogilby and Morgan's map. Features shown include the retained Artillery Ground wall, Building 1, Cesspit 1, Ditch 5 and Pits 7-13 (scale 1:400)

and presumably fed on domestic refuse before being slaughtered for consumption. The rubbish pits dug here also provided evidence for horn working in the vicinity (see Yeomans PDF supplement).

The development of Gun Street and Artillery Lane

In February 1682 the Old Artillery Ground was sold by the Crown to George Bradbury and Edward Noell for £5700. Bradbury and Noell were acting as agents for the disreputable and remarkably named developer, economist and physician, Dr Nicholas 'If-Jesus-Christ-Had-Not-Died-For-Though-Sins-Thou-Hadst-Been-Damned' Barbon (1640–1698), and they were licensed to construct new houses on the Ground (SoL xxvii, 29–30; TNA, C66/3232 no. 6). On the east side of Gun Street building plots running back to the Artillery Ground wall were leased out by Barbon and his associates from June 1682 onwards. By 1714 most of the plots had been leased and the houses largely built. At the south end of the east side two houses and a meal shop were erected by J Nason in 1682 on the corner plot with Artillery Lane, the site of no. 1 Gun Street. Two houses were built to the north of this on the site of no. 2 Gun Street, on the western side of the excavated site (SoL xxvii, 31–4; BI, deeds 16–19; TH, deeds 127, 212).

The Old Artillery Ground still retained a distinct administrative status and in May 1687 the Crown designated it as part of the Liberty of the Tower of London. The boundaries were carefully described in writing, and marked on the perimeter structures with metal broad arrows. One of these arrows survives to the south end of the site on the wall of 1 Gun Street/43 Artillery Lane (Holder 1997, 15). At this time the southernmost house in Gun Street adjacent to the Artillery Ground wall was held by William Coram (Bayley 1825, 2, cxxi; SoL xxvii, 30, 34; TNA, C66/3296 no. 13).

After the Dissolution the parish of St Botolph Bishopsgate was able to establish some rights over the area of the Old Artillery Ground Liberty and its inhabitants; it was suggested that this area should be included with the parish when a reorganisation of boundaries was considered in 1684, but this scheme was never implemented. During

the 17th and 18th centuries the Liberty was included in the perambulations of the parish boundaries on Rogation Day, and its land was often considered as lying within St Botolph's parish (SoL xxvii, 28n).

The occupants of all this new housing were largely immigrants, most notably Huguenots. These French Protestant refugees had started settling in Spitalfields in the 1660s and 1670s, but their numbers dramatically increased as a result of Louis XIV's revocation of the Edict of Nantes in 1685, which caused their persecution. They were granted freedom of worship and free denization by the Crown. At first they formed a distinct group within the area, concentrating in particular localities, including the Old Artillery Ground. The houses were owned by a handful of landlords and their tenants frequently moved only short distances along the same streets. The Huguenots were associated with silk weaving, drawing on skills they had brought with them from France, and this trade dominated the area from the 1690s until the early 19th century (Bayliss 1997, 590–2, 596–9; Brett-James 1935, 417; Cox 1996, 58, 60, 69; Molleson & Cox 1993, 94–7, 99, 106, 123, 159; Power 1971, 184; Rothstein 1961, 49, 65–7; 1987, 129, 136; SoL xxvii, 4; Strype 1720, book 4, 48).

Archaeological sequence

To the west of the Artillery Ground wall little contemporary activity survived, although to the far south two rooms of a brick building fronting on to Artillery Lane were identified (Building 1) (Fig 25) and to the north the remains of a cesspit probably relating to a property fronting on to Gun Street.

Building 1 incorporated part of the Tudor artillery wall, which formed its external east limit. The north wall was constructed of locally made unfrosted bricks laid in an irregular English bond, with its central section [132] being rebuilt at a later time.

Building 1 was divided into two rooms, probably separated by a timber partition represented by beam slot [318]. In Room 1, to the north, the position of a fireplace was marked by two brick buttresses constructed against the Artillery Ground wall. The buttresses were of similar bricks to those used in the northern wall, [132]. The same

type of brick was also used in a series of 'sleeper' walls one course thick that may have supported timber floor joists. Room 2, to the south, similarly appears to have had a wooden floor, although one resting upon a series of wooden beams set into the ground, represented by beam slots. The building measured a minimum of 5.50m east-west with Room 1 measuring 4.50m north-south and Room 2 up to c.6.0m.

The property was probably of brick construction throughout. The two rooms identified are likely to have been at basement level, with floors at around 11.50m OD. Presumably there were two or possibly three storeys above. The recovery of two horn cores and more unusually a number of flattened horn plates, <SF124>, from the beam slots in Room 2 suggest that horn working went on in the vicinity (see Gaimster PDF supplement). Horn plates were used during the early modern period for both lantern and window panes. It is likely that the building was used for domestic habitation as well as a place of small-scale industry, with the basement divided into a kitchen and workshop. At this time rooms often shared more than one function. Indeed, the practice of living and working in the same building, common in the medieval period, was a way of life that continued into the early modern era prior to the advent of factories and mass production.

The documentary evidence indicates that the Old Artillery Ground was sold for development by 1682. The plot which likely included the area of Building 1 was leased to a J Nason, who constructed two houses and a meal shop at the location. By 1687 the southernmost house in Gun Street, adjacent to the Artillery Ground wall, was held by William Coram. A pottery date of c.1690 to 1700 from the backfill of the slot for an internal partition of Building 1 would indicate that construction, or at least later remodelling, was undertaken by another other than Nason, likely William Coram.

A cesspit (CP1) (Fig 25) backfilled with material dating to the last decade of the 17th century suggests that properties had been constructed further north on Gun Street by this date. The cesspit was lined with local unfrosted bricks and was infilled with a sandy silt containing lenses of ash. A lead cloth seal, <SF14>, from the Dutch community

at Colchester was retrieved from the cesspit (see Gaimster PDF supplement). This seal was derived from a bale of fine woollen cloth known as bay. Its presence suggests that a cloth merchant or perhaps a tailor may have lived in the property associated with this cesspit.

Early 18th century

During the early 18th century the pattern of residential and light industrial activity continued. The Tudor Artillery Ground wall continued to form the eastern external wall of Building 1 and to separate the backyards and gardens of properties fronting on to Crispin and Gun Streets.

Crispin Street

Gascoigne's map of the parish of Stepney in 1703 shows that the western frontage of Crispin Street was completely built-up (Fig 26).

In September 1709 the Hamlet of Spitalfields decided to demolish its almshouses in

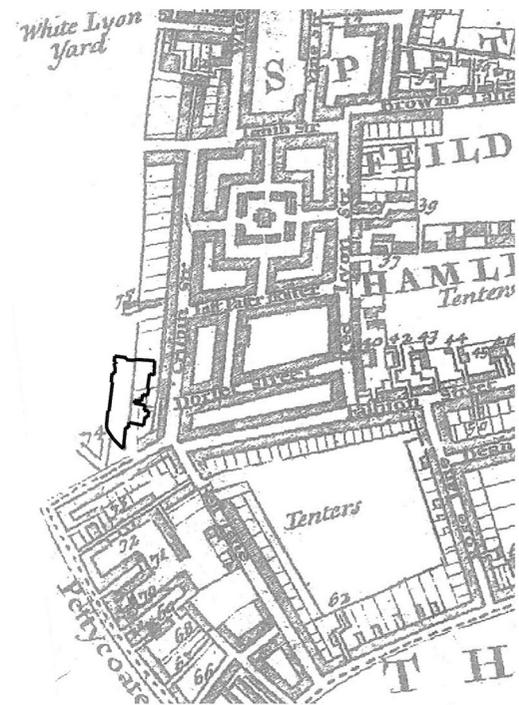


Fig 26. Gascoigne's map of the parish of Stepney in 1703

Crispin Street and rebuild them, to provide improved accommodation for the poor of the parish (TH, L/CCS/1/2 p 217). By February 1726 the lease of the houses built by William Savill had descended to Abram Davis, when the leasehold property was divided. There were five houses on the plot and in 1730 John Pike's three houses were sold to Samuel Savill of Westminster (LMA, MDR 1730/3/377).

Archaeological sequence

To the east of the Artillery Ground wall the partial remains of a second cellared building were unearthed (Building 2), from which an S-shaped iron hook, <SF80>, probably for hanging meat, and an antler tine wall hook, <SF42> (Fig 27), were recovered. Its walls were built of locally made bricks of 17th- or early 18th-century date laid in a random bond and enclosed a space measuring 3.30m east-west by 2.60m north-south, although the structure continued to the east beyond the limits of the excavation (Fig 28). The remains of a brick-lined drain were identified in the north-west corner of the cellar, lined with similar bricks to those used in the wall. The remnants of two successive brick-paved floor surfaces, lying at 11.98m OD and 12.09m OD, were identified overlying make-up deposits containing pottery post-dating c.1700.

Building 2 is thought to represent an extension or separate building to the rear of a property fronting on to Crispin Street, perhaps the middle property of John Pike. Its function could not be established. Immediately to its rear, a well-preserved horn core lined cesspit (CP2) (Fig 29) was excavated suggesting that the occupiers were involved in butchery, tanning or horn working (see Yeomans PDF supplement). Although truncated it has been estimated that as many as 1,000 horn cores may have been used originally in its lining (see Yeomans PDF supplement). The disused cesspit was used for rubbish disposal, and associated pottery indicates a deposition date of between c.1730 and 1780. The quantity of horn cores involved in the lining of Cesspit 2 suggests that there was a sizeable local processing industry. Other discoveries of post-medieval horn core lined pits within the locality include 6-7 Crescent (CST85), 8-10 Crosswall (XWL79) and Cutler Street (CUT78), where about a dozen examples were investigated.

To the north of Building 2, Cesspit 3 was lined with locally made bricks of 17th- or 18th-century date (Fig 28). It was infilled with rubbish, including pottery and clay tobacco pipes dating to the early 18th century. This material, in addition to the recovery of other early 16th- or 17th-century finds, such as a complete pewter spoon,



Fig 27. Antler tine wall hook <SF42> from Building 2

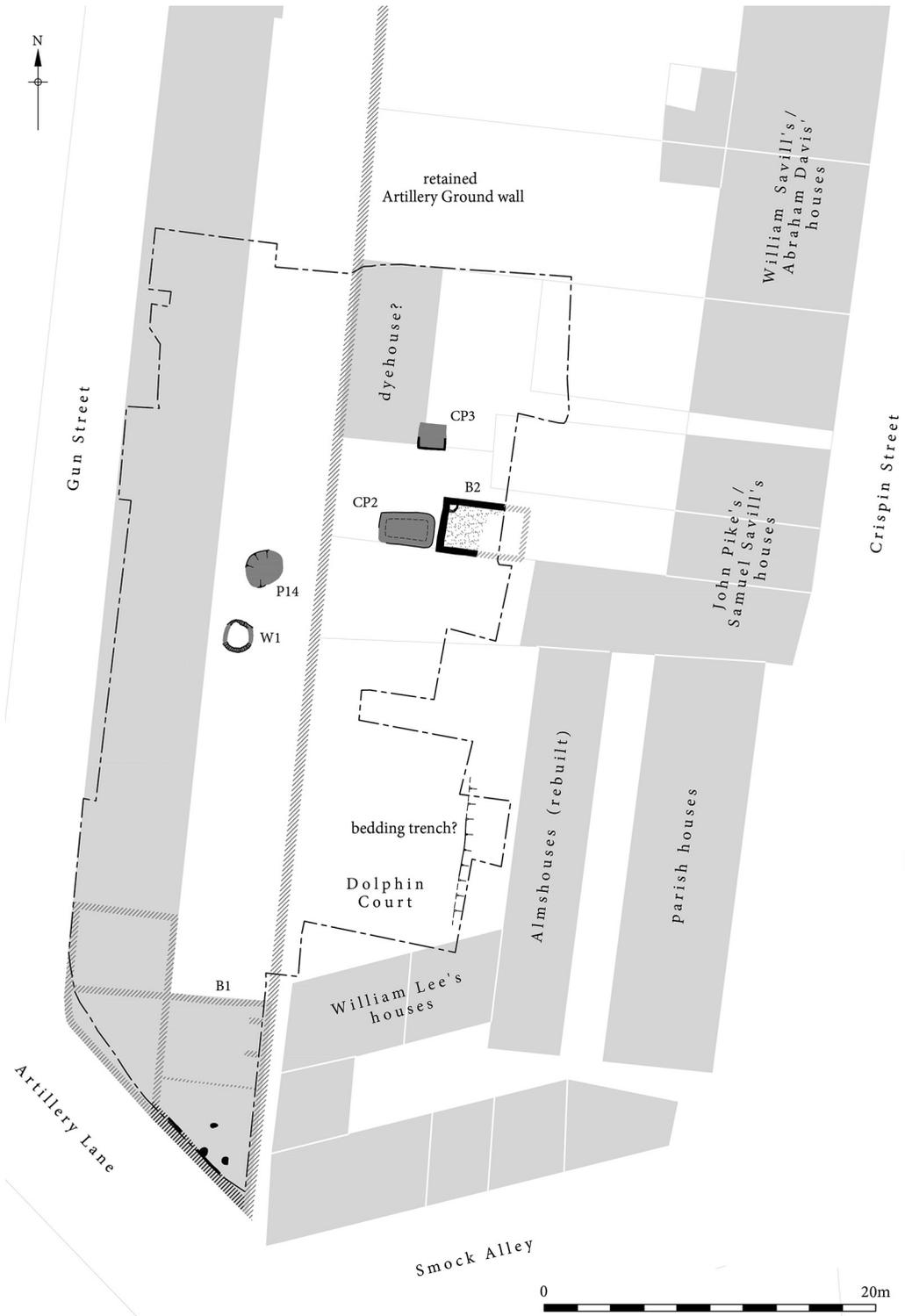


Fig 28. Plan of early 18th-century features including Building 2 (conjectured background structures from Horwood's map of 1799) (scale 1:400)



Fig 29. The horn core lined cesspit (CP2) to the rear of Building 2, view looking east (1.0m scale)

<SF43> (see Gaimster PDF supplement), indicates that the cesspit had been used for some years before its final usage. A worked bone ring, <SF110>, possibly representing a curtain ring or fitting, was also present (see Gaimster PDF supplement). This cesspit was probably associated with the southernmost property of William Savill, to the east of what could be the dye-house.

Gun Street and Artillery Lane

The brick wall around the Liberty of the Old Artillery Ground remained in place. Sections of it were included in a property conveyance on the east side of Gun Street in 1709, and in a conveyance in Crispin Street in 1715 (LMA, MDR 1709/1/55, 1715/2/50).

By the early 18th century the freehold of the entire eastern side of Gun Street was acquired by the Sheffield family (SoL xxvii, 33). Huguenots lived in the immediate vicinity at this time, such as widow Daubrines at no. 9 Gun Street in 1709 (LMA, MDR 1709/1/55). The 18th-century silk trade of the area was increasingly dominated by Huguenot merchants and master weavers, especially the merchants of Spital Square.

These wealthy figures controlled the journey-men weavers, who mostly worked in their own homes on piece rates. Some master weavers also lived in Crispin Street (Rothstein 1961, 39, 58, 67–8).

Archaeological sequence

Building 1 appears to have fallen into a state of disrepair evidenced by a small group of postholes in Room 2 (Fig 30, first phase). These may have held timber uprights to support the ceiling or constituted a temporary measure to shore it up prior to more substantial rebuilding. The renovation included an extensive rebuild of the external south wall, [245]. This wall was constructed of bricks dated to the 18th to early 19th century, laid in an irregular Flemish bond.

In Room 1 the original wooden floor was replaced with a brick surface. This was set on a bedding layer continuing into Room 2, from which contained pottery and clay tobacco pipes dated to the end of the 17th to early 18th centuries, including the rim of a rare Portuguese faience plate (see Jarrett PDF supplement). The brick surface was partially constructed of reused brick and was at a level of 11.65m OD. To the north-east corner of the room, in an alcove between the external north wall and the fireplace, a platform was constructed at a slightly higher level than the brick floor. This raised platform was built from reused squared roof tile and was probably used for storage, or perhaps served as a base for a stove.

Building 1 underwent a later phase of alteration (Fig 30, second phase). The dividing wall between Rooms 1 and 2 was demolished and new floor make-up layers were laid in the basement, the uppermost extending across both rooms. Pottery and clay tobacco pipes recovered from these deposits dated from 1690 to 1710, including a purple and blue decorated Westerwald stoneware mug (Fig 12.7). The partition between Rooms 1 and 2 appears to have been reinstated. A brick-paved surface was constructed of locally made bricks at a level of 11.77m OD. The base of the fireplace was relaid with reused ½ bat brick in an irregular bond and the raised platform in the alcove between the fireplace and the north wall was relaid with flagstones.

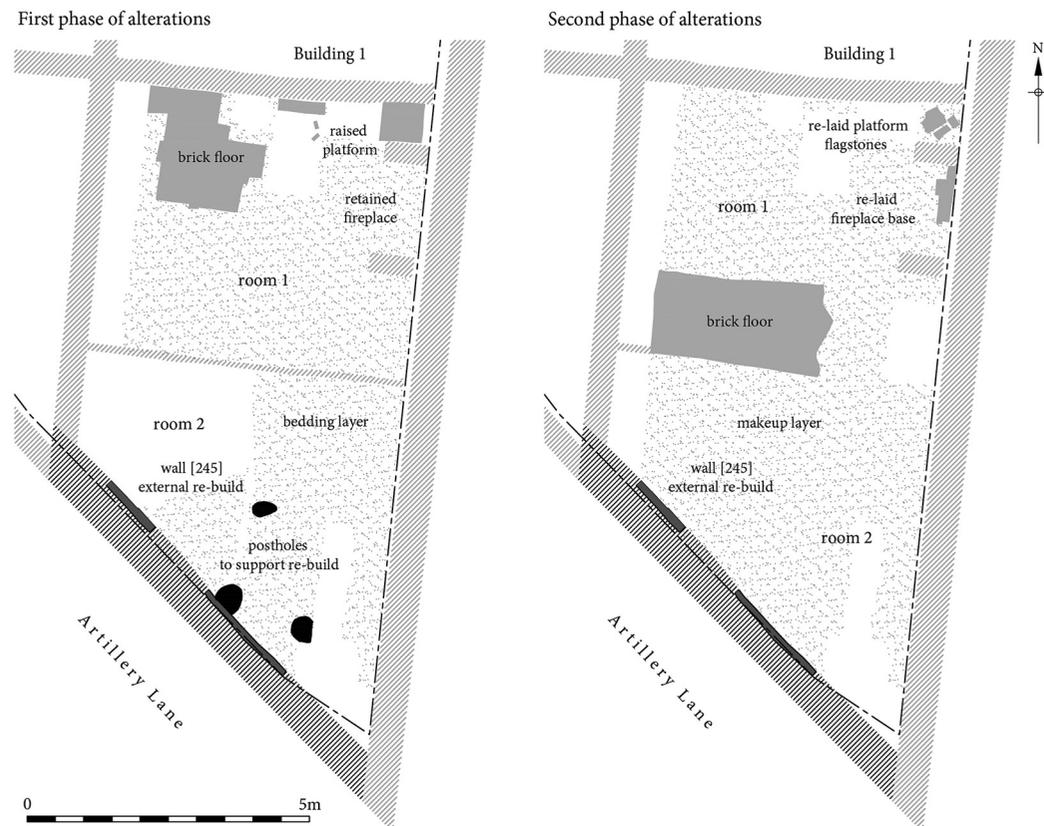


Fig 30. Detailed plans showing the two phases of early 18th-century alterations to Building 1 (scale 1:135)

The pottery recovered from the floor make-up deposits of Building 1 included a number of sugar cone moulds (Fig 12.8–12.10) and syrup collecting jars, indicating that sugar refining took place in the vicinity. Raw sugar had been imported into Britain largely from Spain, or from Spanish or Portuguese plantations in the New World, but from the mid-17th century it was sourced from the developing English colonies in the West Indies (Brooks 1983, 10). The sugar arrived in Britain in a semi-refined state known as ‘muscovado’ in wooden casks or hogsheads (*ibid*, 8). The ‘muscovado’ varied in quality but it usually required secondary refining in order to produce the quality of sugar required. This involved the addition of water and the successive boiling and decanting of the syrup. Lime and egg white or bull’s blood would be added to ‘clarify’ the syrup before it was strained through a

cloth into a conical sugar mould to set into sugar loaves (*ibid*). The syrup set into sugar crystals and viscous molasses, the latter being drained away by removing the bung at the base of the sugar mould and placing it on to a syrup collecting jar.

In the mid-16th century there were only two sugar-houses in Britain, both of which were located in London, but by 1750 there were 80 refineries in London alone (Hugill 1978, 27). The historical and archaeological evidence suggest that riverside sites were favoured for the refineries, presumably to be close to the ships that imported the ‘muscovado’ (Brooks 1983, 11). Sugar refineries were also often in close proximity to abattoirs to take advantage of the supply of blood required for clarification (Hugill 1978, 30). The site is at some distance from the river but sugar producers may have been attracted to the Spitalfield’s area by the

butchers working there (see Yeomans PDF supplement). The refining process may have been associated with Building 1, although, as the mould fragments were largely derived from floor make-up, they may represent material that was entirely unrelated to the structure and originated from elsewhere.

Also to the west of the site, located in the backyards of buildings fronting on to Gun Street, the remains of a brick-lined well (W1) and a rubbish pit (P14) were unearthed (Fig 28). Neither feature could be closely dated, although they have been phased to the early 18th century for stratigraphic reasons.

Mid to late 18th century

Crispin Street

In 1755 premises on the west side of Crispin Street were described as abutting westward on to the Artillery Ground wall. In 1746 Dolphin Court lay to the west of Crispin Street and was entered from Smock Alley to the south. Directory evidence indicates that Smock Alley between the 1760s and the 1780s was populated by weavers, apothecaries, mercers, a hosier, a lace-maker, a tea-dealer and a goldsmith.

By the middle part of the century a number of the houses along the western side of Crispin Street were rebuilt. By this time this side of the street was owned by the Bouverie family (SoL xxvii, 137). Between the 1730s and 1760s Crispin Street was inhabited by some of the richest master weavers in the silk trade, including Louis Chauvet at no. 39, who specialised in handkerchiefs and may have employed as many as 450 men (Rothstein 1961, 44–6). The tradesmen established in the houses of Crispin Street in the 1780s included the warehouseman Job Clark at no. 46 in 1781–1783 and the bottle merchant Loftus Highland at no. 49 in 1785–1790, who dealt in both earthenware and glass vessels.

By the end of the 18th century Pitts Court, an alley of eight houses, had been established to the rear of no. 47 Crispin Street at the northern end of the site by a Mr Pitts (GL, MS 6008/56). In 1772 Mr Pitts demolished part of the Artillery Ground wall (SoL xxvii, 34).

Brushfield Street (Union Street) was created in 1780 to give east–west access

from Hawksmoor's Christ Church (1714) to Bishopsgate and was the continuation of Paternoster Row (to the north-east of the site).

Archaeological sequence

The archaeological evidence for the repair and modification of the Tudor Artillery Ground wall supports the documentary evidence indicating that part of the boundary survived the demolition by Mr Pitts and continued to demarcate the property division between the houses fronting on to Gun and Crispin Streets.

To the north-east, Building 2 remained standing (Fig 31). Interestingly, Horwood's map of 1799 indicates that its site was occupied by a communal garden (Fig 32). A charcoal and cinder layer deposited over the brick-paved cellar floor contained pottery and clay tobacco pipes of late 18th-century date. This deposit also contained a fragment of a Tin-glazed wall tile, <SF33>, decorated with a biblical scene representing 'Zacchaeus up a tree' (Luke 19:3–4), in manganese on white. A similar example, though in blue, is held in the collections of the Victoria and Albert Museum, London, and has been dated to the early 18th century (Archer 1997, no. 48, 439). The horn core lined cesspit (CP2, see above) immediately to the rear of the building was deliberately filled in during the mid-18th century. Notable finds include an early example of a decorated lead-glass drinking vessel base and a Belgian Spa water bottle, both dating to the late 17th century (see Shepherd PDF supplement). Along the northern limit of excavation part of a brick-lined well was discovered (Fig 31, W2), it may have belonged to the houses of Pitt Court. For safety reasons it could not be excavated and therefore its date of disuse was not determined.

During the late 18th century a number of trades were present in the properties to the east of the Old Artillery Ground wall, including a hosier, a lace-maker and a number of weavers, but again the finds recovered are not specific or concentrated enough to confirm the presence of any particular trade. Although a significant proportion of the bottle glass assemblage came from the rear of no. 49 Crispin Street, where the bottle

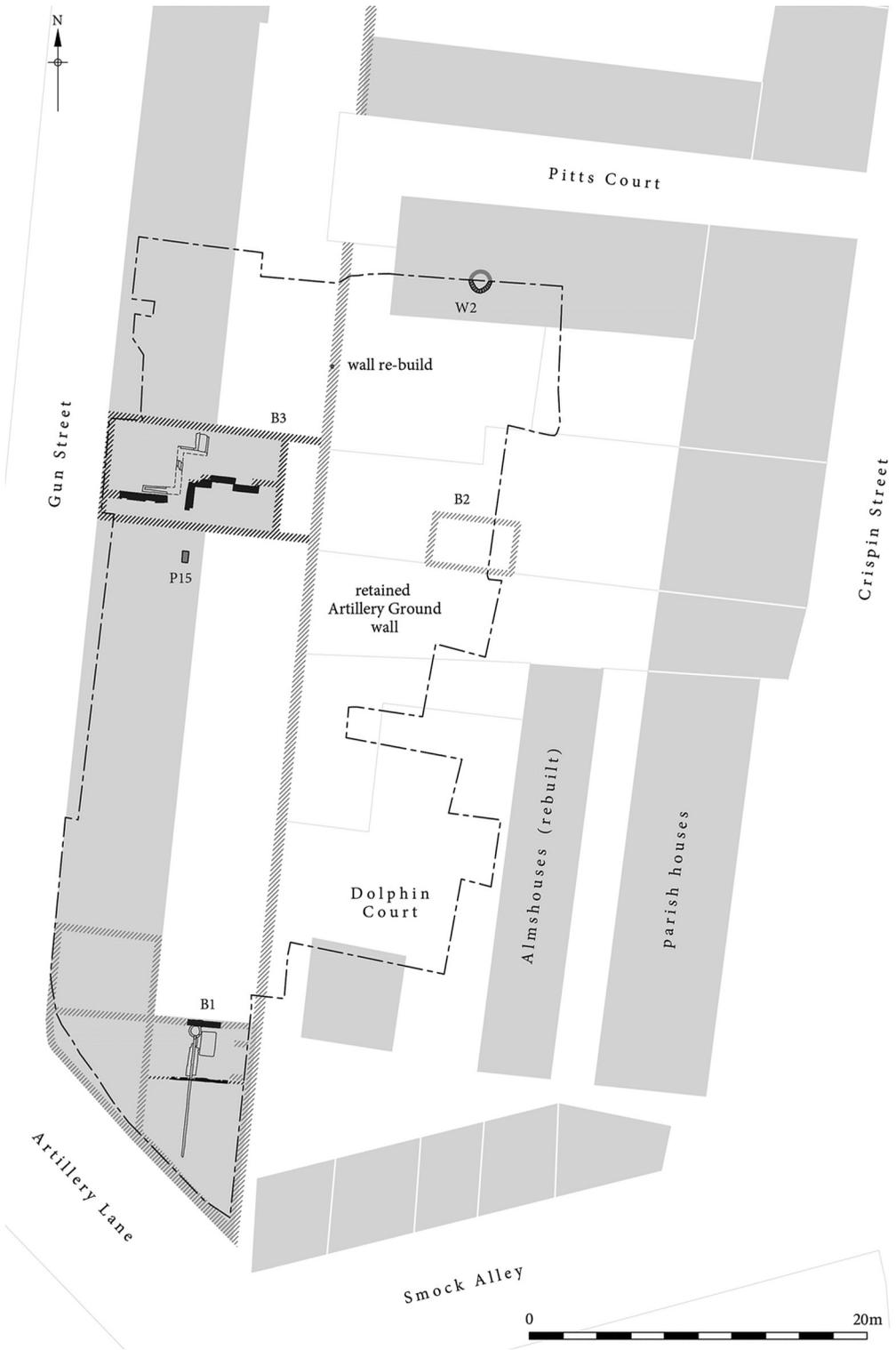
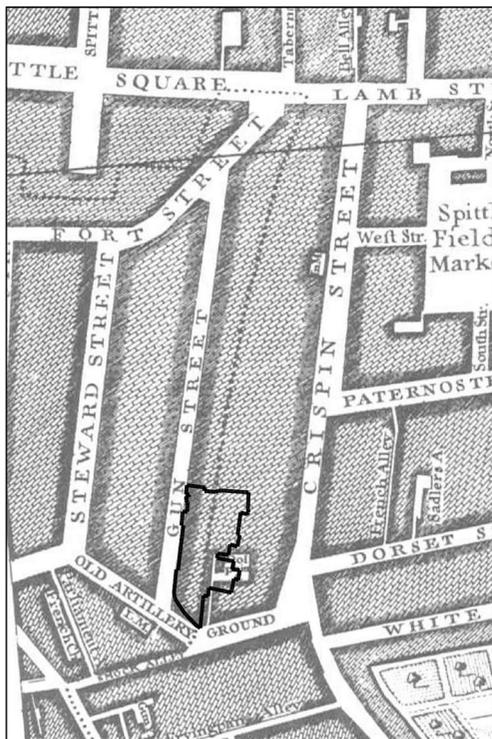
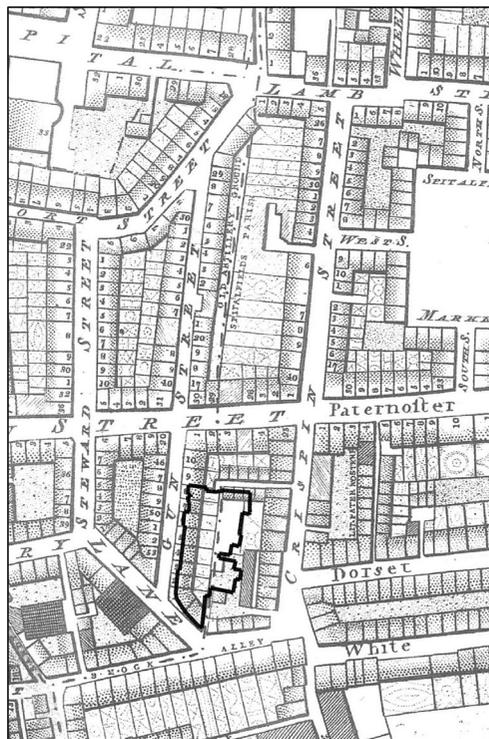


Fig 31. Plan of the mid-late 18th-century features (conjectured background structures from Horwood's map of 1799). Features shown include Buildings 1 and 2 (retained), Building 3, Pit 15 and Well 2 (scale 1:400)



Rocque 1746



Horwood 1799

Fig 32. The site as shown on Rocque's map of 1746 and Horwood's map of 1799

merchant Loftus Highland is known to have lived during the late 18th century, an equally significant amount came from the vicinity of Building 1 to the south. Both assemblages contain material broadly dated to the 17th and 18th centuries and probably represent waste derived from domestic consumption.

Gun Street and Artillery Lane

By the time of John Rocque's map of London was produced in 1746 (Fig 32), almost the entire Spitalfields area was densely built-up (Hyde 1982, pl 6), but the Old Artillery Ground retained its boundaries, its separate local government and its exclusive character. In 1772 the trustees of the Liberty referred to the old brick wall around the Ground as their 'Town Wall'.

At this time Gun Street included the homes of weavers of light silks and handkerchiefs, including Daniel Giles, Louis Desormeaux and Louis Chauvet, who had moved there

from Crispin Street. In the 1770s and 1780s land tax returns and directory evidence indicate that the houses of Gun Street were tenanted by silk-weavers, and that most were occupied by two or more families. These included some with Huguenot names (GL, MSS 6005/17–21; various directories). The three houses on the east corner of Gun Street and Artillery Lane (no. 1 Gun Street and no. 43 Artillery Lane) were owned by Robert Lum, who died in May 1781. The freehold of these properties was transferred to other family members in a settlement in July 1797, when the house right on the corner was newly built. It had previously been occupied by John Fonteneau, who had first appeared on land tax returns here in 1775–1778, and was now in the tenure of Elizabeth Barry (GL, MSS 6005/19–21; TH, deed 1562).

Archaeological sequence

Further alterations were made to Building 1

(Fig 31). The cellar continued to be divided into two rooms but the partition wall was moved 2.0m further north, enlarging Room 2 to the south and shrinking Room 1. Once again the floor was raised and repaved with locally made red and purple bricks (MoL fabric 3032). The level on the floor in both rooms was at *c.*11.95m OD. The base of the fireplace and the platform in the alcove to the north of the fireplace were also repaved, both with locally made bricks dating from the late 17th to early 19th century.

A north–south aligned brick-lined drain was inserted into the floor, running northwards through both rooms, discharging into a soakaway adjacent to the north wall of the building. The central section of the north wall was also rebuilt at this time with a mixture of reused and contemporary 18th-century brick in a random bond. This reconfiguration of the internal space and installation of the drain and soakaway suggests that the function of these cellars had changed.

To the north of the partition wall Room 1 had a brick-paved floor with purpose-built drains and a possible soakaway (Fig 31). These suggest that the room was designed with a particular function in mind. Domestic activities involving water, including laundry, are obvious possibilities, but there are other commercial alternatives, such as dyeing. To the south of the partition in Room 2, a compacted clayey silt make-up layer was present, but no contemporary floor surface survived. A recess in the partition wall is likely to have been the base to a chimney. No trace of a fireplace was detected in Building 3 although one might have been removed by truncation.

To the north-west of Building 1 were the remains of another cellared structure, Building 3, fronting on to Gun Street (Fig 31). Its walls were largely constructed of reused orange bricks (MoL fabric 3033) set in a random bond to the width of one stretcher and one header or 1½ bats. The remains of at least two rooms were delineated at cellar level by an internal partition (Rooms 1 and 2). This property on Horwood's 1799 map corresponds to no. 6 Gun Street (Fig 32). The thickness of the cellar walls suggests that they were load-bearing, indicating the presence of upper storeys.

No specific occupants can be linked with nos 5 or 6 Gun Street, to which the remains of Building 3 probably relate, and few finds were retrieved, none of which provide evidence for specific activities. Indeed as with excavations to the north (Jeffries 2001, 54–5), although historically well attested the Huguenot silk-weavers of Spitalfields remain archaeologically invisible.

19th century

The rapid decline of the silk industry in the early 19th century replaced the relative prosperity of Spitalfields with considerable poverty. Most of the population lived in common lodging houses created by subdividing the 18th-century houses. By the 1850s the local streets and alleys were notorious for criminal activity. By now the Huguenot element of the local populace had either moved away or been assimilated. They were replaced by a new wave of East European Jewish immigrants, who were also fleeing persecution. The Jews opened small clothing workshops and furriers throughout the area (Molleson & Cox 1993, 115; SoL xxvii, 8).

The Old Artillery Ground wall and Crispin Street

Richard Horwood's map of London of 1799 shows many of the local house numbers (Fig 32). Pitts Court is shown opening off the west side of Crispin Street at the north end of the site. The almshouses were still present, with the parish houses on their east side and Dolphin Court on the west, now accessed by an entrance from the south end of Crispin Street. It is not known how long the almshouses continued in use. The boundaries of the Old Artillery Ground are still shown on this map.

The 1814 edition of Horwood's map shows at least nine houses around Dolphin Court, although the eastern range may still have been the almshouses (Laxton 1985, pl 16). Three are listed in land tax returns from 1799 to 1811 (plus one or more for Crispin Court), four from 1817 to 1825 and 12 from 1841 to 1848 (GL, MSS 6008/56–81; 6008A/1–9). In 1841 and 1851 there were ten properties occupied by working-class families, including immigrants from Ireland, Scotland, Sweden and Amsterdam (TNA,

HO107/710/13 fols 37–8; HO107/1543 fols 159–61).

No. 49 Crispin Street between 1816 and 1843 was occupied by the lead, oil and coal merchant Francis Milner, by which time he also stocked window glass. No. 50 was a bottle and phial warehouse held by George Clode and John Richards in 1817–1824, and Richards and Son in 1825–1841. This premises extended southward to the corner with Raven Row (formerly Smock Alley). There was another bottle warehouse at no. 43 in 1817 (*Johnstone's London Commercial Guide* 1817; *Robson's London Commercial Directory* 1830; *Robson's London Directory* 1835; *Robson's Commercial Directory of London* 1840; GL, MSS 6008/72–81; 6008A/1–4; 11936/469/915121; 11936/518/1092185–6; 11936/520/1084838–9; TNA, HO107/710/13 fols 30–1). The eight houses of Pitts Court remained at the rear of no. 47 Crispin Street until at least 1825 (GL, MS 6008/81). In 1841 and 1851 the houses at nos 46 to 49 Crispin Street were in residential multiple occupancy. The residents included at no. 48 a cap-maker from Russia, and at no. 48½ the French-born Celestin Roger, who described himself as a Gothic sculptor. There were also some Irish immigrants (TNA, HO107/710/13 fols 30–1; HO107/1543 fols 152–4).

The houses of Dolphin Court and the south-west side of Crispin Street were demolished in the 1860s when the Providence Row Night Refuge was established by The Reverend Daniel Gilbert. This institution took its name from its first home in Finsbury Square. A new building for it was opened in Crispin Street in late 1868, 'with a front of eclectic and forbidding character', occupying most of the eastern half of the site. It housed 300 homeless women and children, and 50 men, overseen by the Sisters of Mercy. The refuge later expanded into annexes in Gun Street and Artillery Lane (SoL xxvii, 140–1). In 1891 there were 14 Sisters, a servant and 301 inmates and boarders (TNA, RG12/275 fol 141).

Between 1861 and 1881 the remaining houses to the north of the Refuge at nos 45–49 Crispin Street were occupied by working-class residents, including tailors and wheelwrights. There were increasing numbers of immigrants from Holland and Poland living here (TNA, RG9/264 fols

7v–9; RG10/503 fols 16v–17v; RG11/437). By 1891–1901 the houses were occupied by several Jewish families from Austria, Holland, Germany, Russia, Poland and Prussia, amongst whom the tailoring trades predominated. There were still a few Irish people in 1891 (TNA, RG12/275 fols 24v–26; RG13/300 fol 48).

Archaeological sequence

To the north of the site, part of the Tudor precinct wall, which had been partially rebuilt in the 18th century, was again reconstructed and repaired (Fig 31). The primary rebuild, [108], was constructed with purple and red bricks (MoL fabric 3034 & 3033) bonded with a sandy lime mortar in an irregular bond. An east–west return was also identified to the east, [116], bonded into the rebuild and of similar construction suggesting a contemporary date. Both these sections could relate to the creation of Pitts Court, although they more likely post-date the demolition of the latter after 1825 and represent the reinstatement of the boundaries of properties fronting on to Crispin Street. The presence of a blocking wall, [107], also indicates that an opening once existed in the rebuilt boundary wall. The blocking wall is built from a combination of reused 17th- and 18th-century bricks, including Dutch paving bricks and machine made frogged bricks, suggesting that the opening was filled in after 1850.

The area to the north-east remained within the backyards of nos 47 to 49 Crispin Street. Building 2 probably corresponds to no. 49, which was occupied by Francis Milner from 1816 to 1843 (see above). By the middle of the 19th century nos 47 to 49 were in multiple occupancy. From this date through to at least 1901 these properties were occupied by a multitude of individuals and families largely comprising working-class European immigrants, including a number of tailors. No contemporary stratigraphy was identified and very few finds were retrieved.

Gun Street and Artillery Lane

During the 19th century the inhabitants of the Liberty enjoyed exemption from the Middlesex county rate, because of its

privileged status. The area was joined to the Whitechapel Union by the Poor Law Commissioners in 1837 and in 1900 the Liberty was abolished and it became part of the new borough of Stepney (SoL xxvii, 34–5).

The streets of the Old Artillery Ground were particularly poor (Bayliss 1997, 598; Compton 1894, 10, 13; Sheppard 1971, 167–8; SoL xxvii, 6–8, 35, 103). The silk industry was replaced by food and drink selling, and other service trades (Cox 1996, 58–9, 61, 64). No. 1 Gun Street on the corner of Artillery Lane was a public house throughout most of the 19th century; it was also listed as no. 10 Artillery Street. It was at first called the Cock on the Hoop, run by Nathaniel Gill in 1832–1841 and by his widow Maria Gill in 1851 (*Robson's London Commercial Directory* 1830; *Robson's London Directory* 1835; *Robson's Commercial Directory of London* 1840; GL, MS 11936/531/1133900; TNA, HO107/659/1 fol 7; HO107/1543 fol 17), and later was renamed the Artillery Tavern.

By the middle of the century no. 2 Gun Street was a house of refuge with 28 inmates, and nos 3–7, 8 and 9 were in multiple occupancy by working-class families (TNA, HO107/1543 fols 18–21v). In 1871 no. 2 was a Ragged School. There were increasing numbers of Dutch, German, Polish and Russian immigrants in the 1870s and 1880s, but fewer Irish (TNA, RG10/504 fols 53v–56v; RG11/438). By 1891–1901 most of the heads of households in these houses were Jews from Austria, Holland, Jerusalem, Poland, Romania and Russia, although there were still Irishmen at no. 2. Most of the immigrants worked in tailoring or shoemaking and some in food retailing. No. 7 was a lodging house with 15 boarders and 27 lodgers (TNA, RG12/275 fols 125–8; RG13/300 fols 31–3).

Archaeological sequence

Building 1 continued to be inhabited, but underwent further alteration. The internal wall dividing Rooms 1 and 2 was rebuilt, and shifted further to the north. The new partition wall encapsulated the southern buttress of the earlier but now defunct fireplace in Room 1. The partition wall originally had a doorway connecting Rooms 1 and 2, which was bricked up with reused

bricks at a later date. The floor level in Room 1 was raised and it was repaved. A bedding layer of sandy silt contained pottery dating from 1780 to 1850.

At some point during the 19th century the cellars of Building 1 required structural strengthening. Abutting both the new partition wall and the Tudor Artillery Ground wall to the east was a brick buttress, measuring 0.56m by 0.56m, and bonded with a Portland-type cement. A second internal buttress, supporting the north wall of the building, was constructed over the backfilled soakaway, similarly bonded with a Portland-type cement. There were some repairs to the brick-paved floor. Cartographic evidence identifies Building 1 as no. 43 Artillery Lane and suggests that although remodelled it continued to stand on the same footprint until demolition during the current redevelopment. The cellars were finally backfilled with brick and concrete demolition rubble containing pottery and glassware dated to the 19th and 20th centuries.

The 18th-century drains and soakaway in Room 1 of Building 3 were filled and a new brick-paved floor was laid over the old one. In Room 2 a pit filled with demolition rubble (P16) truncated the 18th-century subfloor. The pit contained pottery dating from 1800 to 1850, plus part of a square-toed leather shoe, <SF57>, and an iron meat cleaver, <SF69>. Partly covering the backfill was a layer of compacted clayey silt mixed with broken brick and tile, representing a make-up layer for a floor paved with unglazed, square earthenware tiles.

The pottery from Building 3 included typical 19th-century industrial fine wares and refined whitewares with sponged decoration, often associated with households of lower socio-economic status. This supports the documentary evidence, suggesting that the area had declined in status. As on Crispin Street many of the houses of Gun Street were divided into lodging houses, occupied by poor working-class immigrants, largely from Eastern Europe. Cartography connects Building 3 to no. 5 or 6 Gun Street. A structure stood on the same footprint until its demolition as part of the current redevelopment. By the time of the 1938 Goad Fire Insurance map this building had been renumbered as no. 7 Gun Street.

To the north of Building 3 and abutting the 19th-century rebuild of the Tudor Artillery Ground wall were the remains of a brick-lined cesspit (CP4 [99], not illustrated). Its lining was built of reused and new unfroged and froged red brick (fabric 3032) in an English Garden Wall bond. It measured 2.15m by 1.80m and was 2.0m deep, and it may have been a 'privy' located in the backyard of a property to the north of Building 3, perhaps the original no. 7.

The cesspit was infilled with an ashy silty clay, [98], containing a very large assemblage of finds. The pottery indicates that it was backfilled and went out of use between c.1860 and 1880, coinciding with the installation of London's first subterranean brick intercepting sewage system. This system was officially opened in 1865, though it was not completed until ten years later. This was the first time that London's sanitation problems had been addressed (Halliday 1999). Around the same time, possibly following the Public Health Act of 1875, local authorities started to collect refuse, so the need for cesspits and rubbish pits in back gardens declined. Although clearly the deposit could have been part of a house clearance event, the infill and abandonment of the cesspit, and the soakaways in both Buildings 1 and 3, mark the end of an era, after which it becomes increasingly difficult to find the material culture of Londoners in directly associated archaeological deposits.

The glass assemblage from Cesspit 4 was dominated by phials and bottles for medicine, wine and sauce, but also included wine glasses, tumblers and a tankard (Carter 2005). Fragments of a poison bottle and the base of a press-moulded vase were also retrieved. The pottery assemblage was dominated by food and drink serving forms, particularly plates and tea wares, although vessels associated with food storage and preparation were also identified in addition to sanitary wares and items for display (see Jarrett PDF supplement). The contents of this cesspit is likely to have derived from the lodging house established at no. 7 Gun Street from at least 1871 until 1901. During this period up to 42 lodgers, all male, were resident, listed with a variety of different trades. The pottery assemblage also confirms the decline in the status of the occupants of

the Old Artillery Ground during the 19th century.

Other finds from Cesspit 4 included a hexagonal ivory scale-tang cutlery handle, <SF62>, an ivory toothbrush, <SF126>, an 1856 farthing, <SF12>, and a heavily worn gold and enamel finger ring, <SF6>, the latter dating to the late 18th or early 19th century (see Gaimster PDF supplement). A pair of probable gas fittings, <SF85>, was also recovered in addition to at least 38 composite sheet metal buttons, many of which were of the same type (<SF67>, <SF95> & <SF96>). The number of buttons suggests that either a tailor or perhaps a button-maker may have been operating nearby. As noted in the documentary evidence many of the immigrants moving into the area in the 19th century worked in the tailoring trade. In contrast to the neighbouring properties the majority of the lodgers at no. 7 up until 1881 were British, mostly born in London, but by this date they included more than one tailor.

CONCLUSIONS

The earliest activity identified on site dates to the late 1st and early 2nd century AD and consisted of quarrying and the excavation of a substantial boundary ditch. The ditch eventually became redundant when the site became a cemetery. A total of 36 inhumation burials dating from the early 2nd to the mid-3rd century AD were recorded. These burials form a small part of a large extra-mural Roman cemetery situated to the north and east of *Londinium* (Fig 3). There were two unusual adult burials, one was prone and the other decapitated (Figs 6 & 7). The unusual nature, low status, of some of the burials contrasts with some of the higher status burials observed elsewhere in the extra-mural cemeteries. The inhumations at Crispin Street show a variation in burial rite akin to that observed in the eastern cemetery. Currently, the lack of synthesis of data from the various excavated portions of *Londinium's* extra-mural cemeteries means that it is very difficult to detect any significant trends or patterns.

After the closure of the cemetery during the mid-3rd century AD, the only evidence of subsequent Roman activity was a 4th-century AD coin recovered from the cemetery soil,

<SF22>. There was no datable activity on site again until the late 13th century when a large ditch was dug (Fig 19). It represented part of the outer precinct boundary of the medieval Priory and Hospital of St Mary Spital. To the east of the boundary lay the Lollesworth Field, which appears to have been used as pasture and sporadically for the quarrying of brickearth and gravel, as in Roman times. The outer precinct was leased to predecessors of the Honourable Artillery Company just prior to the Dissolution, and a brick wall delineated this boundary that, although subject to repair and rebuilding, was to remain extant until the present day (Fig 22). The outer precinct, known then as the Artillery Ground, remained in the possession of the Artillery Company until 1682. To the east the Lollesworth Field, which became known as the Spital Field, remained as open ground and continued to be used for grazing and quarrying until the early 17th century.

The late 17th century witnessed the development of the site for residential use with the Old Artillery Ground wall forming the back boundary to new properties fronting on to Gun and Crispin Streets. During the late 17th and mid-18th centuries there was evidence of relative prosperity for a number of industries, including horn working, clay tobacco pipe manufacture and sugar-refining. During the 19th century the houses on Gun Street and Crispin Street passed into multiple occupancy as the prosperity of their inhabitants decreased. The archaeological evidence recovered from the 19th-century refuse deposits confirms the presence of relatively low-status individuals and suggests that some of them were employed in tailoring.

SPECIALIST CONTRIBUTIONS

(The following are available from the LAMAS website as a PDF file with separate bibliography.)

The Roman pottery

James Gerrard and Malcolm Lyne

The post-Roman pottery

Chris Jarrett

The clay tobacco pipes

Chris Jarrett

The ceramic building materials

John Brown

The medieval and post-medieval glass

John Shepherd

The post-Roman metal and small finds

Märit Gaimster

The leather

Quita Mould

The animal bones

Lisa Yeomans

Environmental archaeology summary

Nick Branch

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NOTE

¹ MOLA Resource Library, www.mola.org.uk/resource-library (accessed 7 April 2015).

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 CLRO Corporation of London Record Office
 GL Guildhall Library
 LMA London Metropolitan Archives
 TNA The National Archives
 TH Tower Hamlets Local History Library

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